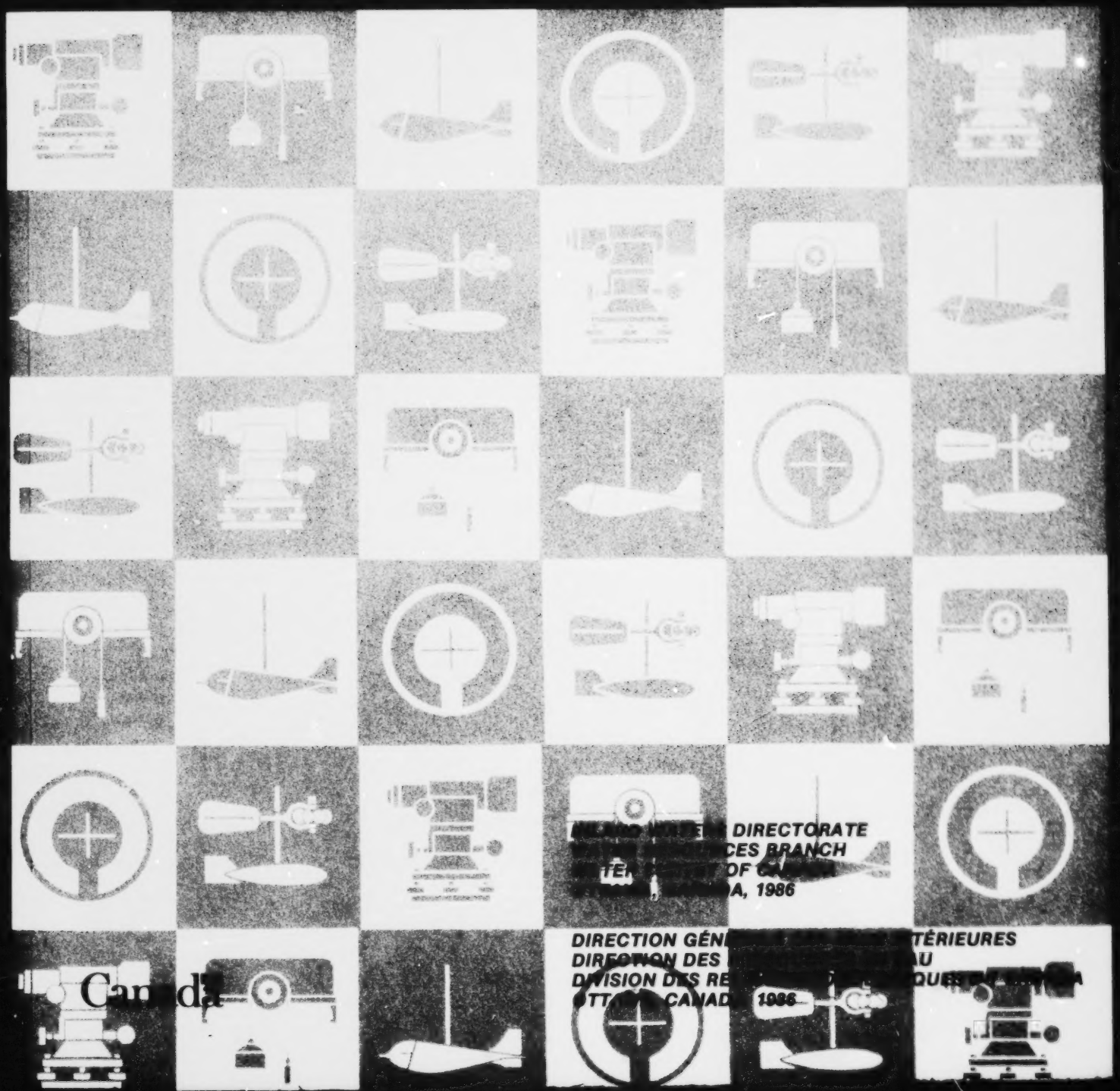
Sediment Data

# Alberta

Données sur les sédiments

1984



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Sediment Data

# Alberta

Données sur les sédiments

## 1984

*INLAND WATERS DIRECTORATE*
*WATER RESOURCES BRANCH*
*WATER SURVEY OF CANADA*
*OTTAWA, CANADA, 1986*

*DIRECTION GÉNÉRALE DES EAUX INTÉRIEURES*
*DIRECTION DES RESSOURCES EN EAU*
*DIVISION DES RELEVÉS HYDROLOGIQUES DU CANADA*
*OTTAWA, CANADA, 1986*

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## PREFACE

This publication was prepared by personnel of the Sediment Survey Section, Water Survey of Canada Division, under the direction of the Director, Water Resources Branch, Department of the Environment, Ottawa.

The basic data were collected and compiled under the supervision of the Regional Chief of the Water Resources Branch at Calgary, Alberta.

The co-operation received from provincial agencies and from other organizations is gratefully acknowledged.

## PRÉFACE

Le groupe d'étude des sédiments de la Division des relevés hydrologiques du Canada, sous l'autorité du directeur des Ressources en eau du ministère de l'Environnement, à Ottawa, a préparé la présente publication.

Le chef régional de la Direction des ressources en eau, à Calgary (Alberta), a supervisé la collecte et la compilation des données de base.

Nous remercions vivement les organismes provinciaux, ou autres, pour leur collaboration.

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## INTRODUCTION

The Water Resources Branch of the Department of the Environment herein presents for the 1984 calendar year, the results of the sediment survey investigations conducted in Alberta by the Water Survey of Canada.

Data on the character and quantity of fluvial sediments provided by sediment survey investigations are intended for use in studies of water quality, environmental impacts, river processes and behaviour, and engineering design.

General introductory information on the sediment survey is included in this publication. Similar information for the associated hydrometric survey is given in the regular publications containing surface water data.

Details on individual stations and related records, as well as recent data that have not yet been published, may be obtained upon application to:

Regional Chief,
Water Resources Branch,
Department of the Environment,
Bag 2909,
Postal Station 'M',
(Room 854,
220–4th Avenue S.E.),
Calgary, Alberta.
T2P 2M7

or to the Director, Water Resources Branch, Department of the Environment, Ottawa, Ontario, K1A 0E7.

## INTRODUCTION

Dans la présente publication de la Direction des ressources en eau du ministère de l'Environnement, on trouvera les résultats des études des sédiments effectuées dans les cours d'eau de l'Alberta par la Division des relevés hydrologiques du Canada au cours de l'année civile 1984.

Les données recueillies sur la nature et l'importance de la charge solide dans les cours d'eau doivent servir aux études portant sur la qualité des eaux, les incidences environnementales, les processus fluviaux, le comportement des cours d'eau et la conception de projets.

La presente publication contient des renseignements généraux préliminaires sur les études des sédiments. Des renseignements semblables sur les études hydrométriques connexes sont contenus dans les publications régulières présentant des données sur les eaux de surface.

On peut obtenir des renseignements supplémentaires sur les stations et les relevés, ainsi que des données récentes non encore publiées, en s'adressant au:

Chef régional
Direction des ressources en eau
Ministère de l'Environnement
Sac postal 2909
Succursale postale 'M'
(Pièce 854,
220, Quatrième avenue S.-E.)
Calgary (Alberta)
T2P 2M7

ou au directeur des Ressources en eau, ministère de l'Environnement, Ottawa (Ontario), K1A 0E7.

## SCOPE OF PUBLICATION

Descriptive information about sediment stations is given. This refers to the Location, Latitude and Longitude, Drainage Area and whether the flow is Natural Flow or Regulated Flow (the year that regulation began is given, if known), Type of Gauge and the Total Suspended Sediment Load in Tonnes for the Period of Record is also included. International Gauging Stations are identified and the names of co-operating agencies who supply data are given; unusual conditions at the sediment station that could effect the data results are explained under "Remarks".

This publication contains data on streamflow, instantaneous suspended sediment concentration; daily mean suspended sediment concentration; daily suspended sediment loads; dissolved solids concentration; load summary; particle-size distribution of suspended sediment in percent sand, silt and clay; bed load and bed material; water temperature when samples were collected; type of sampler and the single sampling vertical location.

A historical sediment data summary includes such information as Sampled Concentration Maximum and Minimum; Suspended Sediment Load Maximum Daily and the Total for Period. The Period of Record and the Type of Operation for each year of data are also given. A Summary for the Months of record gives the Period of Record Mean, the Mean for Period of Record and the Standard Error of Mean as a percent.

## ORGANIZATION AND HISTORY OF SEDIMENT SURVEYS IN CANADA

In Canada, investigations of sediment transported by streams were first undertaken by individual organizations or agencies in 1948, to meet the needs of federal and provincial agencies for assessment of particular projects. Although the investigations were extended to meet expanding needs after 1948, it was not until 1961 that a systematic survey was undertaken by the Water Resources Branch.

The sediment survey program has the following objectives:

(1) Collection and provision of data related to sediment transport in Canadian rivers for applications in water resource engineering, water quality and environmental studies.

(2) Provision of information and advice related to sediment transport.

(3) Assessment, improvement and standardization of equipment and techniques used in Canada's sediment survey program.

## PORTÉE DE LA PUBLICATION

Des données descriptives sont présentées sur les stations d'étude des sédiments. Elles concernent leur emplacement, leurs latitude et longitude, leur bassin versant, la nature de débit (naturel ou régularisé, avec indication, le cas échéant, de l'année où la régularisation a commencé, si elle est connue), le type d'instrument de mesure employé et le débit total des sédiments en suspension (en tonnes) pour la période de relevé. Les stations internationales de jaugeage sont indiquées, ainsi que le nom des organismes qui fournissent les données. Des explications concernant des conditions exceptionnelles qui ont pu influer sur les résultats sont présentées dans la partie «Remarques».

Cette publication renferme des données sur le débit des cours d'eau, les concentrations instantanées de sédiments en suspension, les concentrations journalières moyennes de sédiments en suspension, les débits journaliers de sédiments en suspension, les concentrations de matières dissoutes, les débits solides totaux (résumés), la granulométrie des sédiments en suspension exprimée en pourcentage de sable, de limon et d'argile, le charriage et les matériaux du lit, la température de l'eau au moment de l'échantillonnage, le type d'échantillonneur employé et l'emplacement des verticales de prélèvement d'échantillons uniques.

Un résumé des données historiques sur les sédiments est inclus. On y trouve divers renseignements comme les concentrations maximale et minimale mesurées, le débit journalier maximal des sédiments en suspension et le total pour la période. La période de relevé et le type d'exploitation des stations sont indiqués pour chaque année. Dans un résumé pour les mois de relevé, on donne la moyenne pour chaque période et pour l'ensemble des périodes de relevé ainsi que l'erreur-type de la moyenne, en pourcentage.

## ORGANISATION ET HISTORIQUE DES ÉTUDES DES SÉDIMENTS AU CANADA

Au Canada, les études dans ce domaine ont débuté en 1948 en réponse aux besoins exprimés par certains organismes fédéraux et provinciaux pour l'évaluation de projets donnés et étaient le fait d'organismes privés. Bien que les études se soient poursuivies après 1948 pour satisfaire aux besoins accrus, ce n'est qu'en 1961 que la Direction des ressources en eau les a entreprises de façon systématique.

Les buts de ces études sont de:

(1) réunir et produire des données sur les transports solides dans les cours d'eau canadiens, données dont on peut avoir besoin pour des études concernant l'environnement, la qualité des eaux et la conception de projets portant sur les ressources en eau.

(2) produire des informations concernant les transports solides.

(3) évaluer, améliorer et uniformiser le matériel et les techniques employés dans le programme d'étude des sédiments au Canada.

## PUBLICATION OF SURFACE WATER AND SEDIMENT DATA

Sediment data have been published in a variety of formats since the beginning of the Sediment Survey Program.

During the years 1948 to 1960, some sediment data were collected for several Prairie rivers to meet the needs of particular projects. The first Water Resources Paper series containing sediment data incorporated a selection of these data and also data for part of the year ending September 30, 1961, at stations established for the continuing program. The second issue was a biennial publication covering only the continuing program for the 1962 and 1963 water years. All subsequent editions titled *Sediment Data Canadian Rivers* have been published annually. The sediment data since 1978 have been presented entirely in the International System of Units (SI).

Commencing with 1984, the *Sediment Data* are presented and published in a new format wherein Canada is divided into eight regions. The provinces each represent a separate region except for New Brunswick, Newfoundland, Nova Scotia and Prince Edward Island, which together form the Atlantic Provinces region, and the Yukon and Northwest Territories which make up another. The publications are identified by the province or territories covered and the year in which the data were collected. These data are published annually on a calendar-year basis and the stations are listed alphabetically.

The first edition of a *Sediment Data Reference Index* was published for data to 1972. It contains a tabulation of locations in Canada where sediment data were collected by the Water Survey of Canada. The index has been subdivided alphabetically by province or territory, with sediment survey stations also listed alphabetically. Commencing with the 1978 publication, data are presented in the International System of Units (SI) and will continue to be published biennially. The latest edition supersedes all previous editions because it contains any corrections or additions since the last publication.

The first edition of a new publication series titled *Historical Sediment Data Summary for Canadian Rivers* was produced for data to 1974. This publication contains a summary of historical monthly and annual mean suspended sediment load, and annual extremes of daily suspended sediment concentration and loads and total annual suspended load. Commencing with the 1978 publication, data are presented entirely in the International System of Units (SI). This publication has been discontinued, as much of the information is now included in the new annual *Sediment Data* publication.

## PUBLICATION DES DONNÉES SUR LES EAUX DE SURFACE ET LES SÉDIMENTS

Depuis le début du programme d'étude des sédiments, la présentation des données a varié.

De 1948 à 1960, on a recueilli des données pour plusieurs cours d'eau des Prairies en prévision de la réalisation de certains projets. La première publication contenant des données sur les sédiments a paru dans la série intitulée *Water Resources Paper*; elle présentait un choix de ces données ainsi que des données recueillies en 1961 avant le 30 septembre à des stations établies pour la réalisation du programme permanent. La deuxième publication a porté sur les données recueillies dans le cadre du programme au cours des années hydrologiques 1962 et 1963. Par la suite, les données ont été publiées annuellement sous le titre *Données sur les sédiments - rivières canadiennes*. Depuis 1978, les données sont exprimées en unités du Système international (SI).

En 1984, la présentation des données a été modifiée. Le Canada a été divisé en huit régions, une région pour chaque province, sauf le Nouveau-Brunswick, Terre-Neuve, la Nouvelle-Écosse et l'Île-du-Prince-Édouard qui, ensemble, forment la région des provinces de l'Atlantique, et les Territoires du Yukon et du Nord-Ouest, qui forment une autre région. Les publications sont nommées selon la région couverte et l'année des données (année civile). Ces publications sont annuelles. Les stations y sont présentées par ordre alphabétique.

Un *Index de référence des données sur les sédiments* est publié. La première édition portait sur les données disponibles jusqu'en 1972. Les emplacements où des données sur les sédiments ont été recueillies au Canada par la Division des relevés hydrologiques y sont présentés sous forme de tableau. L'*Index* est subdivisé selon l'ordre alphabétique par province ou territoire, et les stations de mesure des sédiments sont classées par ordre alphabétique. À partir de 1978, les données sont exprimées en unités du Système international (SI). L'*Index* est publié tous les deux ans; l'édition la plus récente annule toutes les éditions antérieures, car elle renferme toutes les corrections et mises à jour effectuées depuis la dernière parution.

Une autre série de publications a porté le titre *Sommaire chronologique des données sur les sédiments de rivières canadiennes*. La première édition renfermait les données disponibles jusqu'en 1974. Cette série présentait un résumé donnant les moyennes mensuelles et annuelles historiques du débit des sédiments en suspension, les valeurs annuelles extrêmes de la concentration journalière et du débit journalier des sédiments en suspension et le débit annuel total des sédiments en suspension. À partir de 1978, les données ont été présentées en unités du Système international (SI). Cette série a été abandonnée, car une bonne partie de l'information est maintenant contenue dans la nouvelle publication annuelle intitulée *Données sur les sédiments*.

## COLLECTION AND PROCESSING OF BASIC DATA

### 1. *Equipment and Instrumentation*

The sediment survey program of the Water Resources Branch is conducted in cross sections on rivers selected specifically for the sediment survey or for the hydrometric survey. Certain cross sections are located at traffic bridges, while others are equipped with cableways, or automatic pump samplers.

The following sediment samplers have been used in the sediment survey program:

(a) Depth-integrating suspended sediment wading-type hand sampler, USDH-48, used on small streams or during winter periods.
(b) Depth-integrating suspended sediment sampler, USDH-59, used as a handline suspension for small and medium size streams.
(c) Depth-integrating suspended sediment samplers, USD-49, and USD-74, used on a reel suspension for medium and large streams whose depths are less than five metres.
(d) Point-integrating suspended sediment samplers, USP-61, USP-61-A1, USP-63, and USP-72, used for point-integrating sampling, or depth-integrating sampling if the depth is over five metres, or in a cross section with a very high velocity.
(e) Automatic pump sampler is an automatic pumping system permitting unattended collecting and bottling of individual water samples pumped from a fixed point in a stream. This sampler is normally installed at isolated locations where otherwise no data would be available during ice break-up or peak periods.
(f) Bed material sampler, USBM-54, used on large or deep streams or on those streams with hard-packed streambeds.
(g) Bed material sampler USBMH-60, used on some large or deep streams or on those streams with soft-packed streambeds.
(h) Bed material sampler USBMH-53 used on some small or shallow streams.
(i) Lane bed material sampler, a drag-type sampler used on small streams or those with soft streambeds.

### 2. *Hydrometric Surveys*

The hydrometric survey includes the standard procedures for observations of water levels, streamflow measurements, water surface slope determinations if required, and observations of water temperature. The streamflow measurements are made in conjunction with the sediment load measurements and conform to the accepted standards of the regular hydrometric survey.

### 3. *Sediment Sampling Program*

The following is a summary of the elements associated with the Sediment Sampling Program:

(a) Periodic measurement of suspended sediment load by the

## COLLECTE ET TRAITEMENT DES DONNÉES DE BASE

### 1. *Matériel*

L'étude des sédiments réalisée par la Direction des ressources en eau porte sur des sections transversales de cours d'eau choisis spécialement à cette fin ou pour les relevés hydrométriques. Certaines sections sont situées sous un pont, d'autres sont accessibles par téléphérique, ou sont étudiées à l'aide d'un échantillonneur sous pression.

On a utilisé les échantillonneurs suivants:

(a) L'échantillonneur intégrateur selon la profondeur, type simple, USDH-48, employé dans les cours d'eau peu profonds ou en hiver;
(b) L'échantillonneur intégrateur selon la profondeur USDH-59, utilisé comme une ligne dans les cours d'eau petits et moyens;
(c) Les échantillonneurs intégrateurs selon la profondeur USD-49 et USD-74 fixés au bout d'une corde s'enroulant autour d'un moulinet et employés dans les cours d'eau gros ou moyens dont la profondeur est inférieure à cinq mètres;
(d) Les échantillonneurs intégrateurs USP-61, USP-61-A1, USP-63 et USP-72, employés ponctuellement ou sur toute la verticale, et utilisés lorsque la profondeur est supérieure à cinq mètres ou dans les sections transversales qui connaissent un débit très élevé;
(e) Un échantillonneur automatique permettant le prélèvement en bouteilles, sans surveillance, d'échantillons uniques d'eau obtenus à l'aide d'une pompe en un point précis d'un cours d'eau; il est ordinairement installé dans un endroit isolé où aucune donnée ne pourrait être obtenue autrement au cours de la débâcle ou des périodes de débit de pointe;
(f) L'échantillonneur USBM-54 employé pour le prélèvement d'échantillons des matériaux du lit dans les cours d'eau importants ou profonds ou dans les cours d'eau dont le fond est dur;
(g) L'échantillonneur USBMH-60 employé pour le prélèvement d'échantillons des matériaux du lit dans certains cours d'eau importants ou profonds, ou dans les cours d'eau dont le fond est meuble;
(h) L'échantillonneur USBMH-53 employé pour le prélèvement d'échantillons des matériaux du lit dans certains cours d'eau petits ou peu profonds;
(i) La drague employée pour le prélèvement d'échantillons des matériaux du lit dans de petits cours d'eau ou dans des cours d'eau dont le fond est meuble.

### 2. *Relevés hydrométriques*

Le relevé hydrométrique comprend, entre autres, l'observation de la hauteur des eaux, la mesure du débit de l'eau, la détermination de la pente de la ligne d'eau, si nécessaire, ainsi que l'observation de la température de l'eau. Les mesures du débit de l'eau et du débit des sédiments se font conjointement, suivant les méthodes acceptées.

### 3. *Échantillonnage des sédiments des cours d'eau*

L'échantillonnage comporte, en gros, les éléments suivants:

(a) La mesure périodique du débit des sédiments en suspension par la méthode d'intégration sur toute la profondeur

depth-integrating method for determining the average suspended sediment concentration in the cross section.

(b) Single suspended sediment samples at a selected vertical for determining the sediment concentration for the days when suspended sediment load measurements are not taken.

(c) Limited measurement of suspended sediment load by the point-integrating method for checking depth-integrated measurements and for determining particle-size distribution in the cross section.

(d) Sampling of bed material for determining particle-size distribution.

(e) Periodic measurement of bed load.

The following is a brief explanation of the elements listed above:

(a) *Suspended Sediment Load by Depth-Integrating Method*: Measurements are made by the depth-integrating method to determine the suspended sediment load carried in the entire cross section of a stream, the average suspended sediment concentration in the cross section, and the size distribution of the sediment particles. It is known that the concentration of suspended sediment tends to increase from the water surface to the streambed and could vary from streambank to streambank.

When making suspended sediment equal-discharge-increment (EDI) measurements, the stream cross section is divided into at least five equal-flow portions and a representative suspended sediment sample is collected from each portion. For each part of the cross section, the suspended sediment load (r) may then be computed by multiplying the flow (q) by the suspended sediment concentration (c):

$$r = q\ c$$

The suspended sediment load (R) for the cross section may be computed by adding the sediment loads for the five equal-flow portions:

$$R = r_n = q_1c_1 + q_2c_2 + \ldots + q_nc_n$$

The depth-integrating method of sampling is used to measure the suspended sediment concentration. This method is based on the premise that the sampler fills at a rate proportional to the velocity of the approaching flow, and that by traversing the depth of a stream at a uniform speed, the sampler will receive a portion of water sediment mixture at every point in the vertical.

(b) *Single Suspended Sediment Samples at a Selected Vertical*: Single suspended sediment samples, consisting of two bottles each, are collected routinely using the depth or point-integrating samplers at a permanently fixed vertical in a cross section. During periods of very heavy sediment concentration, two or three single sediment samples may be taken per day, while during periods of low concentration, one single sediment sample may only be taken every few days. During extremely low flow periods, the sampling may be limited to one single sample in several weeks or months.

(c) *Suspended Sediment Load by Point-Integrating Method*: A limited number of suspended sediment load measurements are made by the point-integrating method. These measurements are included in the program (a) to check by comparison the "measured" sediment loads obtained by the depth-integrating method with the suspended sediment loads by the point-integrating method and (b) to obtain samples from which to determine particle-size distribution

pour la détermination de la concentration moyenne dans une section transversale;

(b) Le prélèvement d'échantillons uniques des sédiments en suspension selon une verticale choisie, afin de determiner la concentration des sédiments les journées où le débit des sédiments en suspension n'est pas mesuré;

(c) Un nombre restreint de mesures du débit des sédiments en suspension avec intégration en un point précis d'un cours d'eau, afin de vérifier les résultats des mesures avec intégration selon la profondeur et afin de déterminer la granulométrie des particules de sédiments dans une section transversale d'un cours d'eau;

(d) L'échantillonnage des matériaux du lit afin d'en déterminer la granulométrie;

(e) La mesure périodique du charriage.

Voici une brève description des éléments susmentionnés.

(a) *Mesure du débit des sédiments en suspension par intégration selon la profondeur*: La méthode permet de déterminer le débit des sédiments en suspension traversant toute une section transversale d'un cours d'eau, la concentration moyenne des sédiments en suspension dans la section transversale et la granulométrie des sédiments en suspension. C'est un fait connu que la concentration des sédiments en suspension augmente généralement avec la profondeur et qu'elle peut varier d'une rive à l'autre d'un cours d'eau.

Avec la méthode d'incréments de débits égaux (IDE), la mesure du débit des sédiments en suspension se fait en divisant une section transversale d'un cours d'eau en au moins cinq tranches où le débit est égal et en prélevant un échantillon représentatif dans chacune d'elles. Le débit des sédiments en suspension (r) pour chaque tranche se calcule en multipliant le débit (q) par la concentration des sédiments en suspension (c):

$$r = q\ c$$

Le débit des sédiments en suspension (R) pour la section transversale est la somme des débits des sédiments des cinq tranches:

$$R = r_n = q_1c_1 + q_2c_2 + \ldots + q_nc_n$$

La méthode par intégration sur toute la profondeur est employée pour mesurer la concentration des sédiments en suspension. Elle suppose que l'échantillonneur se remplit à un rythme proportionnel au débit de l'eau et qu'en étant déplacé à une vitesse uniforme sur toute la verticale, il reçoit une partie du mélange eau-sédiments à tous les points de celle-ci.

(b) *Prélèvement d'échantillons uniques de sédiments en suspension sur une verticale choisie*: De tels échantillons, constitués chacun de deux bouteilles, sont prélevés régulièrement à l'aide d'appareils intégrateurs, selon la profondeur ou ponctuels, sur une verticale permanente d'une section transversale. Lorsque la concentration des sédiments est très forte, deux ou trois échantillonnages peuvent être effectués chaque jour, alors qu'un seul échantillon peut être prélevé à quelques jours d'intervalle lorsqu'elle est faible. Au cours des périodes où le débit est extrêmement faible, l'échantillonnage peut être limité à un échantillon toutes les quelques semaine ou tous les quelques mois.

(c) *Mesure du débit des sédiments en suspension par la méthode ponctuelle*: Un nombre limité de mesures du débit des sédiments en suspension sont faites avec cette méthode. On y a recours a) pour vérifier les valeurs du débit mesurées au moyen de la méthode précédente et b) pour obtenir des échantillons en vue de déterminer la granulométrie des sédiments en divers points de la

at different points in the cross section. The point-integrating sediment loads are computed by graphical methods.

The relationship between the suspended sediment concentration of the single vertical samples and the average concentration in the cross section determined from the suspended sediment load measurements is established for some stations. Using this relationship, the sediment concentrations of the single vertical samples are adjusted to reflect the average suspended sediment concentration in the cross section. These average sediment concentrations in the cross sections are plotted, and a smooth curve is drawn through the points to obtain a concentration graph. This graph represents the average suspended sediment concentration for the period of record. The daily mean concentrations are determined by automated procedures using a digitizer interfaced with a Digital minicomputer.

The daily suspended sediment loads are computed on the basis of stream discharges and the collected suspended sediment concentrations. The daily suspended sediment loads are expressed in tonnes per day and are obtained by multiplying the daily mean sediment concentration (mg/L), by the daily mean discharge ($m^3/s$), and the conversion factor, 0.0864.

(d) *Bed Material Sampling*: In a cross section, bed material samples are usually taken in the same sampling verticals as the suspended sediment samples. Often, additional bed material samples are collected at the water edge, the extreme water level or at other points in the cross section. The total number of bed material samples taken in a cross section usually varies between five and nine.

(e) *Bed Load Measurement*: There are several methods available for measurement of bed load (volumetric method, measurement by samplers, method of tracers, method of constricted cross section, study of sound waves, etc.). The measurement methods should be selected in accordance with river regime.

## 4. *Total Sediment Load*

Sediment transport may be divided into two categories: sediment maintained in suspension in the stream (suspended load), and sediment being carried along the streambed (bed load). To measure the total sediment load, each of these must be measured separately and then totalled. The total sediment load was not computed for this publication.

## 5. *Sediment Survey Laboratories*

The Water Resources Branch maintain sediment survey laboratories in New Westminster, British Columbia; Regina, Saskatchewan; Guelph, Ontario; and Moncton, New Brunswick. The laboratories are equipped to perform the following analyses:

(a) determination of sediment concentration by (1) filtration method, (2) evaporation method and (3) determination of total dissolved solids by evaporation method.
(b) particle-size distribution analysis by (1) bottom withdrawal tube method, (2) sieving and (3) hydrometer method.

Determination of the sediment concentration by the evaporation method is carried out by evaporating the water from the settled sediment sample, with the results being corrected for dissolved solids. The quantity of dissolved solids is determined by evaporating a portion of the decanted water of a sample. In the filtration method, the suspended sediment concentration of water samples is determined by utilizing Gooch crucibles with a Reeve Angel 934AH filter and a Millipore AP20 prefilter and a vacuum system.

section transversale. Cette méthode fait appel à des graphiques pour le calcul du débit des sédiments.

Le rapport entre la concentration des sédiments en suspension dans les échantillons prélevés sur une seule verticale et la concentration moyenne dans la section transversale, telle que déterminée à partir des mesures du débit des sédiments en suspension, est établi pour quelques stations. Il permet de corriger les concentrations mesurées à une seule verticale de manière à donner la concentration moyenne dans la section transversale. Les concentrations moyennes ainsi déterminées sont reportées sur un graphique, et une courbe lisse passant par les points marqués est tracée. Le graphique obtenu représente la concentration moyenne des sédiments en suspension pour la période de relevé. Les concentrations moyennes quotidiennes sont déterminées automatiquement à l'aide d'un convertisseur analogique-numérique relié à un mini-ordinateur numérique.

Les valeurs journalières du débit des sédiments en suspension sont calculées à partir du débit du cours d'eau et des concentrations des sédiments en suspension recueillis. Elles sont exprimées en tonnes par jour. On les détermine en multipliant la concentration moyenne journalière des sédiments (mg/L) par le débit moyen journalier ($m^3/s$) et par un facteur de conversion approprié, 0.0864.

(d) *Échantillonnage des matériaux du lit*: Dans une section transversale, les échantillons des matériaux du lit sont ordinairement prélevés aux mêmes verticales que ceux des sédiments en suspension. Souvent, des échantillons supplémentaires sont pris près des rives, là où le niveau d'eau est extrême et à d'autres points de la section transversale. Leur nombre total pour une section donnée varie ordinairement entre cinq et neuf.

(e) *Mesure du charriage*: La mesure peut se faire par plusieurs méthodes (méthode volumétrique, mesure à l'aide d'échantillonneurs, méthode des traceurs, méthode de la section transversale rétrécie, étude des ondes sonores, etc.). Le choix se fondera sur la nature du régime du cours d'eau.

## 4. *Débit solide total*

Il y a deux catégories de sédiments: les sédiments maintenus en suspension au sein de l'eau (sédiments en suspension), et les sédiments charriés sur le lit d'un cours d'eau (charriage de fond). Les deux types de sédiments doivent être mesurés séparément et leurs valeurs additionnées si on veut mesurer le débit total des sédiments. Toutefois, on ne l'a pas calculé aux fins de la présente publication.

## 5. *Laboratoires d'analyse*

La Direction des ressources en eau possède des laboratoires d'analyse des sédiments à New Westminster (Colombie-Britannique), Regina (Saskatchewan), Guelph (Ontario) et Moncton (Nouveau-Brunswick). Les laboratoires disposent des appareils nécessaires pour effectuer les analyses suivantes:

(a) la détermination de la concentration des sédiments par (1) filtration, (2) évaporation, et (3) détermination des matières dissoutes totales par évaporation.
(b) l'analyse granulométrique (1) par extraction des sédiments déposés dans un tube, (2) par l'emploi de tamis et (3) par l'utilisation d'un hydromètre.

La méthode par évaporation consiste à faire évaporer l'eau d'un échantillon de sédiments décanté et à corriger les résultats pour tenir compte des matières dissoutes. La quantité de celles-ci est déterminée en faisant évaporer une partie de l'eau de l'échantillon décanté. Dans la méthode par filtration, on utilise sous vide des creusets de Gooch munis d'un filtre Reeve Angel 934AH et d'un préfiltre Millipore AP20.

Particle-size analysis was carried out for some suspended sediment samples having gross weights in the range of 0.15 to 5 g using the Bottom Withdrawal Tube method. The particle-size distribution of the Bottom Withdrawal Tube method ranges from 0.002 to 1.000 mm. The Sieve analysis method may be used for samples with a large amount of material coarser than 0.062 mm.

The particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

| Classification | Size (mm) |
|---|---|
| Clay | 0.000 24 – 0.004 |
| Silt | 0.004 – 0.062 |
| Sand | 0.062 – 2.0 |
| Gravel | 2.0 – 64.0 |

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analyzed in distilled water. Chemical dispersion is not used for native-water analysis.

### 6. *Accuracy and Reliability of Field Data and Computed Results*

The overall accuracy and degree of reliability of the sediment data is dependent upon many factors. Some of the more important of these are:

(a) accuracy and reliability of streamflow records;
(b) regime of the river;
(c) type of sampling equipment used to collect the suspended sediment samples;
(d) frequency of suspended sediment discharge measurements;
(e) frequency of individual sampling;
(f) quality of the relationship between the average suspended sediment concentration in the cross section and the concentration of the individual samples;
(g) frequency and method of bed material sampling;
(h) frequency and method of bed load measurements;
(i) accuracy and reliability of the laboratory analysis;
(j) selected methods of computation of the suspended sediment discharge;
(k) interpretation and extrapolation of sediment records.

An assessment of the quality of the records can be made by an examination of the occurrence of the symbols A, B, E on the daily mean discharge and the S on the daily mean concentration.

In general, data collected during open-water periods are more reliable than those collected during periods of ice conditions or those records obtained by estimation. Further, water level data collected utilizing a water-stage recorder are more reliable and accurate than those using a manual gauge only, especially for small or flashy streams.

Une analyse granulométrique a été effectuée pour certains échantillons de sédiments en suspension ayant un poids brut dans l'intervalle de 0.15 à 5 g par la méthode de la burette (extraction des sédiments déposés, à divers intervalles). La distribution de la taille des particules déterminée par cette méthode varie de 0.002 à 1.000 mm. La méthode de tamisage peut être employée pour les échantillons ayant une forte quantité de particules de taille supérieure à 0.062 mm.

La classification granulométrique qui est utilisée dans la présente publication est conforme aux recommandations faites par l'*American Geophysical Union Subcommittee on Sediment Terminology*. La classification est la suivante:

| Classification | Taille (mm) |
|---|---|
| Argile | 0.000 24 – 0.004 |
| Limon | 0.004 – 0.062 |
| Sable | 0.062 – 2.0 |
| Gravier | 2.0 – 64.0 |

La répartition granulométrique qui est fournie dans cette publication, n'est pas obligatoirement représentative de toutes les particules qui sont transportées par un cours d'eau donné. La plupart des matières organiques sont extraites de l'échantillon qui est ensuite soumis à une dispersion mécanique et chimique avant d'être analysé dans de l'eau distillée. La dispersion chimique ne sert pas à l'analyse de l'eau naturelle.

### 6. *Exactitude des données et des résultats*

L'exactitude des données sur les sédiments dépend de nombreux facteurs. On peut citer, parmi les plus importants:

(a) l'exactitude des données sur les débits;
(b) le régime d'un cours d'eau;
(c) le type d'appareil d'échantillonnage utilisé pour prélever les échantillons de sédiments en suspension;
(d) la fréquence des mesures du débit des sédiments en suspension;
(e) la fréquence des échantillonnages isolés;
(f) la qualité du rapport entre la concentration moyenne des sédiments en suspension dans une section transversale et la concentration des échantillons isolés;
(g) la fréquence des échantillonnages des matériaux de fond et la méthode utilisée;
(h) la fréquence des mesures du charriage de fond et la méthode utilisée;
(i) l'exactitude des analyses de laboratoire;
(j) les méthodes de calcul du débit des sédiments en suspension;
(k) l'interprétation et l'extrapolation des données sur les sédiments.

La qualité des données peut être évaluée d'après la fréquence d'utilisation des symboles A, B, E, avec les données sur le débit journalier moyen, et S, avec celles sur la concentration journalière moyenne.

En général, les données recueillies au cours des périodes d'eau libre sont plus sûres que celles qui sont obtenues au cours des périodes de glaces ou par estimation. De plus, les données sur le niveau des eaux qui sont mesurées à l'aide d'un limnigraphe sont plus certaines et plus exactes que celles qui sont mesurées à l'aide d'une jauge manuelle seulement, surtout dans le cas des petits cours d'eau ou des cours d'eau à crues très rapides.

## METHOD OF TABULATION OF SEDIMENT DATA

For stations where the suspended sediment load was obtained, the following data are given where available:

1. The table of *Suspended Sediment Load* includes the daily mean discharge in cubic metres per second, the daily mean concentration in milligrams per litre, and the daily suspended sediment load in tonnes per day. The total monthly discharge and total monthly sediment load is also given for complete months of record.

   For stations where the sediment load in tonnes per day are produced for complete or partial years, the *Total Suspended Load* for the period is given in the descriptive information.

   For stations where only suspended sediment concentrations are obtained, the table of *Suspended Sediment Load* will not be given.

   Additional descriptive information about the sediment station is also given above the table of *Suspended Sediment Load* and will indicate the following, where applicable.

   *Location* – the latitude and longitude co-ordinates of the location of the gauge are given. For stations where the gauge is located an appreciable distance from the discharge measurement section, these co-ordinates give the location of the discharge measurement section.

   *Drainage area* – refers to that area enclosed by a topographic divide such that direct surface runoff from precipitation would drain by gravity into the stream upstream from the location of the station.

   *Natural Flow* or *Regulated Flow* – where the flow is known to be natural, this is indicated. The flow of water in many river systems is affected by upstream regulation. In some cases, the extent of this regulation is not known and therefore is not indicated. However, where the regulation is known to be "appreciable", this is indicated as well as the year that the regulation began, if known.

   *Type of Gauge* – refers to the installation or method used to obtain water level or discharge data:

   (a) Manual – a non-recording type of gauge from which observations of stage normally are obtained once daily.

   (b) Recording – a water-stage recorder from which continuous water levels are obtained on an analog chart. For most International Gauging Stations located in the United States, water level records are obtained utilizing a digital recorder.

   *International Gauging Stations* – on waters adjacent to the international boundary, certain gauging stations have been

## PRÉSENTATION DES TABLEAUX DE DONNÉES SUR LES SÉDIMENTS

Pour les stations de mesure du débit des sédiments en suspension, les données suivantes sont présentées, pour autant qu'elles sont disponibles:

1. Le tableau concernant le *débit des sédiments en suspension* (The table of Suspended Sediment Load) donne le débit journalier moyen de l'eau, en mètres cubes par seconde, la concentration journalière moyenne, en milligrammes par litre, et le débit journalier des sédiments en suspension, en tonnes par jour. Les mois où les données sont complètes, sont également indiqués les débits mensuels totaux de l'eau et des sédiments.

   Dans le cas des stations où le débit des sédiments, en tonnes par jour, est fourni pour une année complète ou une partie de l'année, le total pour la période est indiqué.

   Dans le cas des stations où seule la concentration des sédiments en suspension est obtenue, ce tableau est absent.

   Des renseignements descriptifs additionnels au sujet de la station sont également présentées au-dessus du tableau. On peut y apporter les précisions suivantes:

   *Emplacement* (Location) – La latitude et la longitude de la station de jaugeage sont indiquées. Dans les cas où l'équipement de mesure est situé à une bonne distance de la section où le jaugeage est effectué, on indique les coordonnées de cette section.

   *Superficie du bassin versant* (Drainage area) – Désigne la zone délimitée par une ligne de faîte de sorte que l'écoulement de surface direct provenant des précipitations est entraîné par gravité vers le cours d'eau, en amont de la station.

   *Débit naturel* ou *régularisé* (Natural Flow ou Regulated Flow) – Un débit reconnu comme naturel est indiqué. Le débit de nombreux réseaux hydrographiques est modifié par une régularisation effectuée en amont. Dans certains cas, l'importance de cette régularisation n'est pas connue, et elle n'est donc pas indiquée. Cependant, quand on sait que la régularisation est d'une certaine importance, on l'indique, ainsi que l'année où elle a débuté (si elle est connue).

   *Type de jauge* (Type of Gauge) – Il s'agit des jauges ou des méthodes de jaugeage utilisées pour obtenir les données sur le niveau ou le débit d'un cours d'eau.

   (a) *Manuelle* (Manual) – Indique qu'un appareil non enregistreur est employé pour obtenir normalement une fois par jour les données sur le niveau et le débit du cours d'eau.
   (b) *Enregistreuse* (Recording) – Indique qu'un limnigraphe permet de mesurer de façon continue le niveau des eaux qui est tracé sur un graphique. La plupart des stations internationales de jaugeage des États-Unis obtiennent les données sur le niveau des eaux à l'aide d'un enregistreur numérique.

   *Stations internationales de jaugeage* (International Gauging Stations) – Dans les eaux contiguës aux frontières, on a

designated as "International" and records are approved jointly. Differences between figures published herein and corresponding figures in United States Water Supply Papers are due to variations in automated data processing techniques.

*Contributed Data* – if data were supplied in their entirety or partially by an outside agency, the name of this co-operating agency is given.

*Remarks* – contains a statement pertaining to the sediment sample collection.

2. The table of *Instantaneous Suspended Sediment Concentration* for depth-integrating samples gives the particle-size distributions, in Percent Finer, in millimetres for each sample collected, if available. The Date and Time of the sample collection; Water Temperature; Instantaneous Discharge, if not available the daily mean discharge should be given and indicated by a symbol; Single Sampling Vertical location; Dissolved Solids; Percent Sand, Silt and Clay; Type of Sampler used is also given where available.

   For the suspended sediment measurements, the date, time, water temperature at time of sampling, computed discharge for each sampling panel, concentration and the sampling vertical, coded with the symbol (M) to indicate a sampling vertical of a suspended sediment measurement are given.

3. The table of *Point Integrating Particle-size of Suspended Sediment* gives the particle-size distribution, in Percent Finer, in millimetres, for each sample collected in the measurement. The Date and Time of the sample collection; Instantaneous Discharge for each sampling vertical; Water Temperature; Sampling Vertical; Sample Depth; Concentration in milligrams per litre; Dissolved Solids, in milligrams per litre, and the Percent Sand, Silt and Clay are also given. The Type of Sampler used in the collection of the samples is indicated at the bottom of the table.

4. The table of *Bed Load Particle-size* gives the particle-size distribution, in Percent Finer, in millimetres, for each sample of bed load collected. The Date and Time of the sample collection; Instantaneous Discharge; Sampling Vertical and the Type of Sampler used in the collection of the sample are also given.

5. The table of *Bed Material Particle-size* gives the particle-size distribution, in Percent Finer, in millimetres, for each sample of bed material collected. The Date and Time of the sample collection; Instantaneous Discharge; Sampling Vertical and the Type of Sampler used in the collection of the sample are also given.

désigné certaines stations comme «internationales», et les données obtenues sont approuvées par les pays concernés. Les différences entre les chiffres publiés dans la présente publications et dans les *United States Water Supply Papers* sont dues à des variantes dans les techniques de traitement automatique des données.

*Données fournies* (Contributed Data) – Lorsqu'un organisme extérieur a fourni toutes les données ou une partie des données, son nom est indiqué.

*Remarques* (Remarks) – Renseignements au sujet du prélèvement des échantillons de sédiments.

2. Le tableau des *concentrations instantanées de sédiments en suspension* (The table of Instantaneous Suspended Sediment Concentration) pour les échantillons obtenus par intégration selon la profondeur donne la granulométrie des sédiments, en pourcentage des particules de taille inférieure à une taille donnée, en millimètres, pour chaque échantillon recueilli, si elle est connue. Sont également indiqués la date et l'heure de prélèvement; la température de l'eau; son débit instantané (s'il n'est pas connu, le débit journalier moyen, avec symbole); l'emplacement de la verticale d'échantillonnage; la concentration des matières dissoutes; les pourcentages de sable, de limon et d'argile; le type d'échantillonneur employé, si connu.

   Pour les mesures des sédiments en suspension, la date, l'heure, la température de l'eau au moment de l'échantillonnage, le débit calculé pour chaque tranche de la section d'échantillonnage, la concentration et la verticale d'échantillonnage, avec le code M pour indiquer une verticale d'échantillonnage d'une mesure des sédiments en suspension, sont donnés.

3. Le tableau de la *granulométrie des échantillons ponctuels et intégrés des sédiments en suspension* (The table of Point Integrating Particle-size of Suspended Sediment) donne les pourcentages de particules de taille inférieure aux tailles indiquées, en millimètres, pour chaque échantillon prélevé pour la mesure. Sont également indiqués la date et l'heure de prélèvement de l'échantillon, le débit instantané pour chaque verticale d'échantillonnage, la température de l'eau, la verticale d'échantillonnage, la profondeur de l'échantillon, la concentration des sédiments, en milligrammes par litre, la concentration des matières dissoutes, en milligrammes par litre, et les pourcentages de sable, de limon et d'argile. Le type d'échantillonneur employé est indiqué au bas du tableau.

4. Le tableau de la *granulométrie des sédiments charriés* (The table of Bed Load Particle-size) donne le pourcentage des particules de taille inférieure aux tailles indiquées, en millimètres, pour chaque échantillon recueilli du charriage. Sont également indiqués la date et l'heure de prélèvement de l'échantillon, le débit instantané, la verticale d'échantillonnage et le type d'échantillonneur employé.

5. Le tableau de la *granulométrie des matériaux du lit* (The table of Bed Material Particle-size) donne le pourcentage des particules de taille inférieure aux tailles indiquées, en millimètres, pour chaque échantillon recueilli. Sont également indiqués la date et l'heure de prélèvement de l'échantillon, le débit instantané, la verticale d'échantillonnage et le type d'échantillonneur employé.

6. The table of *Historical Sediment Data Summary* gives the following, for the period of record, where applicable.

(a) Period of Record
(b) Type of Operation
(c) Sampled Concentration
(d) Suspended Sediment Load
(e) Summary.

(a) The *Period of Record* gives the first and last month of record for the year, i.e. (APR-DEC) for April to December. If the *Period of Record* is incomplete this is indicated by an octothorpe (#).
(b) The *Type of Operation* shows *method of sampling* and the *operation schedule*, which are presented as two symbols i.e. M-S.

The first symbol is the *method of sampling* and could be one of the symbols (A), (B) or (M). The symbol (A) indicates that the method of sample collection was by an automatic sampler; (M) represents manual sampling. If samples during the year or season were collected by both automatic sampling and manual methods, this would be indicated by the symbol (B) for both.

The second symbol is the *operation schedule* which is represented by one of the symbols (C), (MS) or (S). The symbol (C) indicates that sediment loads are continuous for the entire year. The symbol (S) indicates that records are available only for partial year or seasonal. If records are available only for individual days of a year, this is indicated by the symbol (MS) for miscellaneous.

(c) The *Sampled Concentration* gives the maximum and minimum concentration, in milligrams per litre, and the date of collection for each year of record. The extreme recorded for the period of record is indicated by an asterisk (*).

(d) The *Suspended Sediment Load* gives the maximum daily load, in tonnes, and the date of occurrence. The extreme recorded is indicated by an asterisk (*). The Total for the Period gives the total load for the period or year, in tonnes. The extreme recorded is also indicated by an asterisk (*). A load which has been revised since the previous publication is marked with the symbol (R) for Revision.
(e) The *Summary* gives the *Mean Load* and the *Historical Mean Load* in tonnes.

The *Standard Error of the Mean %* is calculated using the following equation.

$$\frac{\sigma}{\bar{x} \times \sqrt{n}} \times 100\%$$

For stations with only instantaneous samples, this table will not include the *Suspended Sediment Load* or the statistical information in the *Summary*.

6. Le tableau du *sommaire chronologique des données sur les sédiments* (The table of Historical Sediment Data Summary) donne, pour la période pour laquelle les données sont disponibles, les renseignements suivants lorsque de telles données existent:

(a) La période de relevé
(b) Le type d'exploitation
(c) Les concentrations mesurées
(d) Le débit des sédiments en suspension
(e) Le résumé.

(a) La *période de relevé* (Period of Record) donne le premier et le dernier mois des données au cours de l'année; ex.: (APR-DEC) pour avril à décembre. Le symbole # indique la *période de relevé* est incomplète.
(b) Sous le *type d'exploitation* (Type of Operation) on donne la *méthode d'échantillonnage* et le *calendrier d'exploitation*, qui sont présentés sous forme de deux symboles; ex.: M-S.

Le premier symbole correspond à la *méthode d'échantillonnage*; ce peut être un A, un B ou un M. Un A indique que l'échantillonnage a été fait au moyen d'un appareil automatique; un M, qu'il était manuel; et un B, que durant l'année ou la saison des méthodes manuelles et automatiques ont été employées.

Le deuxième symbole code pour le *calendrier d'exploitation*: ce peut être un C, un MS ou un S. Un C indique que les mesures du débit des sédiments se font pendant toute l'année; un S, que les données ne sont disponibles que pour une partie de l'année ou sont saisonnières; un MS, que les données ne sont disponibles que pour certains jours de l'année.

(c) Pour les *concentrations mesurées* (Sampled Concentration), on donne la concentration maximale et la concentration minimale, en milligrammes par litre, et leur date d'obtention pour chaque année de relevé. La valeur extrême enregistrée est indiquée par un astérisque (*).
(d) Sous le *débit des sédiments en suspension* (Suspended Sediment Load), on donne le débit journalier maximal, en tonnes, et sa date de mesure. Le débit extrême enregistré est indiqué par un astérisque (*). Le débit total pour la période ou pour l'année est indiqué. La valeur extrême est également signalée par un astérisque (*). La lettre R indique qu'une valeur du débit a été révisée depuis la dernière publication.
(e) Le *résumé* donne le *débit moyen* et le *débit moyen chronologique*, en tonnes.

L'*erreur-type de la moyenne* (Standard Error of the Mean), en pourcentage, est calculée à l'aide de l'équation suivante:

$$\frac{\sigma}{\bar{x} \times \sqrt{n}} \times 100\%$$

Dans le cas des stations ne prélevant que des échantillons instantanés, ce tableau ne donnera pas le *débit des sédiments en suspension* ni les données statistiques du *résumé*.

## DEFINITION OF TERMS

The following definitions are given to clarify the terms used in this publication:

*Automatic pump sample* is an individual water-sediment mixture pumped from a fixed point in a stream.

*Bed load* is that material moving in almost continuous contact with the streambed, being rolled or pushed along the bottom by the force of the water.

*Bed material* is the sediment mixture of which the streambed is composed.

*Daily load* is the suspended sediment load expressed in tonnes for a particular day. The daily load is obtained by multiplying the daily mean sediment concentration (mg/L) by the daily mean discharge ($m^3/s$) and the conversion factor, 0.0864.

*Daily mean concentration* is a time-weighted mean value and is computed from a manually constructed concentration curve. The mean concentration value may be determined arithmetically or graphically. The arithmetic mean is obtained either by (1) selecting values from the concentration graph that represents uniform intervals of time and taking the arithmetic average or by (2) selecting values from the graph that represent unequal intervals of time and weighing these values by the time intervals represented by the concentrations. For graphical explanation refer to *Office Procedures for Sediment Data Computations* and for the automated graphical explanation refer to *Automated Hydrometric Computation Procedures*.

*Depth-integrated sediment sample* is a suspended sediment sample collected at a single vertical in a cross section in a sampler moving vertically at a constant transit rate and represents an average sample for that part of the depth ranging from the water surface to about nine centimetres above the streambed.

*Instantaneous suspended sediment sample* is a sample collected at a fixed vertical in a river cross section.

*Measured suspended sediment discharge* is the suspended sediment discharge that can be computed from stream discharge and the concentration of sediment determined from depth-integrated sediment samples.

*Particle-size analysis* is the process of determining the size distribution of particles in a sediment sample.

*Point-integrated sediment sample* is a sample of the water-sediment mixture taken over a specified period of time at a fixed point and depth in a river cross section.

## DÉFINITION DES TERMES

Les définitions suivantes sont présentées afin de faciliter la compréhension des termes utilisés dans la présente publication:

*Échantillonnage automatique à l'aide d'une pompe* (Automatic pump sample): Prélèvement d'un mélange de sédiments et d'eau au moyen d'une pompe fonctionnant automatiquement, en un point précis d'un cours d'eau.

*Charriage* (Bed load): Matières roulées ou poussées sur le fond sous l'action de l'eau, mais restant en contact presque permanent avec le fond.

*Matériau du lit* (Bed material): Mélange de sédiments composant le lit d'un cours d'eau.

*Débit journalier des sédiments en suspension* (Daily load): Débit des sédiments en suspension exprimé en tonnes par jour, pour une journée donnée. On l'obtient en multipliant la concentration journalière moyenne des sédiments (mg/L) par le débit journalier moyen de l'eau ($m^3/s$) et le facteur de conversion 0.0864.

*Concentration journalière moyenne* (Daily mean concentration): Moyenne pondérée en fonction du temps, calculée à partir d'une courbe de la concentration établie manuellement. La valeur de la concentration moyenne peut être déterminée arithmétiquement ou graphiquement. Pour la déterminer arithmétiquement, on peut, soit choisir sur la courbe des valeurs représentant des intervalles uniformes de temps et faire la moyenne arithmétique, soit choisir sur cette courbe des valeurs qui représentent des intervalles inégaux de temps et pondérer ces valeurs en fonction des intervalles de temps correspondants. En ce qui concerne les méthodes graphiques, consulter *Méthodes de bureau pour les calculs de données sur les sédiments* et, pour la méthode automatisée, *Automated Hydrometric Computation Procedures*.

*Échantillon intégré sur toute la profondeur* (Depth integrated sediment sample): Échantillon des sédiments en suspension prélevé sur une verticale précise d'une section transversale d'un cours d'eau à l'aide d'un échantillonneur se déplaçant verticalement à une vitesse constante; il représente un échantillon moyen des matières en suspension entre la surface de l'eau et environ 9 cm du fond.

*Échantillon instantané de sédiments en suspension* (Instantaneous suspended sediment sample): Échantillon prélevé à une verticale précise d'une section transversale d'un cours d'eau.

*Débit mesuré des sédiments en suspension* (Measured suspended sediment discharge): Débit des sédiments en suspension qui peut être calculé à partir du débit du cours d'eau et de la concentration des sédiments déterminée à partir d'échantillons intégrés sur toute la profondeur.

*Analyse granulométrique* (Particle-size analysis): Détermination de la répartition de la taille des particules dans un échantillon de sédiments.

*Échantillon ponctuel et intégré* (Point-integrated sediment sample): Échantillon constitué d'un mélange d'eau et de sédiments, prélevé au cours d'une période de temps donnée en un point précis d'une section transversale d'un cours d'eau et à une profondeur donnée.

*Sediment* is fragmental material which has deposited, eroded or transported by a flowing stream.

*Sediment hydrograph* is a graph showing the variation of suspended sediment concentration or sediment discharge with respect to time.

*Single sample* is a sample taken at a selected permanent vertical in a cross section. Two bottles of water-sediment mixture make up each single sample.

*Single sampling vertical* is a selected permanent vertical in a cross section in which single suspended sediment samples are collected.

*Suspended sediment* is sediment that moves in suspension in water either as a colloid or through the influence of the upward component of turbulent currents.

*Suspended sediment concentration* is the ratio of the weight of dry solids in a water-sediment mixture to the volume of the mixture. The units of this ratio are "milligrams per litre" (mg/L).

*Suspended sediment load* is the quantity of suspended sediment transported through a cross section per unit of time.

*Total sediment load* is the sum of the suspended sediment load and the bed load.

*Unmeasured sediment load* is the difference between total sediment load and measured suspended sediment load.

## DEFINITION OF SYMBOLS

*A – Manual Gauge* – indicates that one or more manual gauge observations per day were obtained and used as the mean for the day for a gauging station equipped with a recording gauge. This symbol is used during open-water periods only.

*B – Ice Conditions* – indicates the presence of ice at the gauging station. For gauging stations where discharge data are obtained, this symbol indicates that the presence of ice has affected the stage-discharge relationship.

*E – Estimated* – indicates estimated data. It indicates that the values between collected sediment samples of a peak period are estimated by some indirect method such as interpolation, extrapolation, from a graph of observed readings, comparison with other streams or by comparison with meteorological data.

*H – Daily Mean Discharge* – is the mean discharge for a particular day, usually referred to as the "daily discharge".

*S – Sample(s) collected this day* – indicates that a depth-integrated or point-integrated measurement, single vertical sample(s) or a sample collected by an automatic sampling device, was collected this day.

*Sédiments* (Sediment): Matières fragmentaires qui ont été déposées, érodées ou transportées par un cours d'eau.

*Hydrogramme des sédiments* (Sediment hydrograph): Graphique représentant la variation de la concentration des sédiments en suspension ou du débit des sédiments en fonction du temps.

*Échantillon unique* (Single sample): Échantillon prélevé sur une verticale permanente particulière dans une section transversale. Deux bouteilles du mélange eau-sédiments constituent un seul échantillon.

*Verticale d'échantillonnage unique* (Single sampling vertical): Verticale permanente d'une section transversale où des échantillons uniques de sédiments en suspension sont prélevés.

*Sédiments en suspension* (Suspended sediment): Matériaux qui se déplacent au sein de l'eau, soit sous forme colloïdale, soit sous l'influence des forces ascendantes des courants turbulents.

*Concentration des sédiments en suspension* (Suspended sediment concentration): Rapport entre le poids des matières solides sèches contenues dans un mélange eau-sédiments et le volume du mélange. Les unités employées sont les «milligrammes par litre» (mg/L).

*Débit des sédiments en suspension* (Suspended sediment load): Quantité de sédiments en suspension transportés par unité de temps à travers une section transversale d'un cours d'eau.

*Débit total des sédiments* (Total sediment load): Somme du débit des sédiments en suspension et du débit charrié.

*Débit non mesuré des sédiments* (Unmeasured sediment load): Différence entre le débit total des sédiments et le débit mesuré des sédiments en suspension.

## DÉFINITIONS DES SYMBOLES

*A – Turbidisonde simple* – Indique qu'on a effectué à une station de jaugeage dotée d'une turbidisonde enregistreuse au moins une observation par jour à l'aide d'une turbidisonde simple et qu'on s'en est servi comme moyenne pour la journée en question. Le symbole n'est employé qu'au cours des périodes d'eau libre.

*B – Glaces* – Indique la présence de glaces à la station de jaugeage, qui ont faussé la relation hauteur-débit.

*E – Estimative* – Indique des données estimatives, c'est-à-dire que les valeurs fournies entre les prélèvements d'échantillons d'une période de débit de pointe, sont évaluées de façon indirecte, par exemple par interpolation, extrapolation, à l'aide de graphique, ou par comparaison avec d'autres cours d'eau ou avec des données météorologiques.

*H – Débit journalier moyen* – Debit moyen pour une journée donnée, ordinairement appelé «débit journalier».

*S – Échantillon(s) prélevé(s) en ce jour* – Indique qu'on a prélevé ce jour-là un (ou des) échantillon(s), intégré(s) selon la profondeur ou ponctuel(s), sur une (ou des) verticale(s) d'échantillonnage, ou qu'on a prélevé un échantillon au moyen d'un dispositif d'échantillonnage automatique.

## CO-OPERATION AND ACKNOWLEDGMENTS

Co-operative undertakings with other agencies form an important part of the activities of the Water Survey of Canada. Close co-operation has been maintained with public agencies and private organizations concerned with water resources. Data have been mutually exchanged and suspended sediment collection operations have been facilitated by the assistance received from a number of organizations.

On waters adjacent to the International Boundary, certain sediment stations are maintained by Canada (or the United States) under agreement with the United States (or Canada) and the records are collected and compiled in a manner equally acceptable to both countries. These stations are designated as "International Gauging Stations" in this publication.

For the valuable assistance and co-operation received in obtaining sediment survey records, the Water Survey of Canada is indebted to other federal and provincial organizations which are noted as contributing agencies in the summary for the year. A list of these agencies may be found in the *Sediment Data Reference Index*.

## REVISIONS

A number of corrections or revisions have been made to previously published data. Many of these were required because of typographical or computational errors which were exposed when the data were stored on magnetic tape and monthly means were re-calculated by computer. Other errors were discovered or different interpretations of basic data were made during the systematic review of historical streamflow data presently underway.

Revisions to daily discharges or sediment data are not published at present. However, those stations where a systematic review has been conducted are identified in the Surface Water Data Reference Index publication. The Historical Streamflow Summary publications contain revisions to monthly and annual mean discharges, and annual extremes of discharge. Revisions, corrections or additions made to discharges and sediment after January 1, 1980, are indicated by an "R" symbol in the data summaries. Detailed information on revisions to historical data is available from the appropriate Regional Chief.

## MICROFICHE

All sediment data are available in metric units on microfiche, upon request. The data are stored in station number order by province. There are 270 frames per microfiche at 48X reduction; there is a visible heading showing the fiche number, type of data, province, beginning and ending station number and year of data, and the month/year the fiche was created. The last frame is an index of the contents of that fiche.

## COOPÉRATION ET REMERCIEMENTS

Le travail entrepris en coopération avec d'autres organismes représente une partie importante des activités de la Division des relevés hydrologiques du Canada. On a maintenu une étroite collaboration avec les organismes, publics ou privés, qui s'intéressent aux ressources en eau. On a échangé des données sur les sédiments, et l'assistance fournie par certains organismes a facilité les opérations d'échantillonnage des sédiments en suspension.

Dans les eaux adjacentes à la frontière internationale, les stations dépendent du Canada ou des États-Unis selon l'accord intervenu entre les deux pays, et les relevés sont faits et compilés de façon à satisfaire les deux pays. Ces stations sont nommées «Stations internationales de jaugeage» dans la présente publication.

La Division des relevés hydrologiques du Canada est redevable à plusieurs organismes fédéraux et provinciaux, dont les noms apparaissent dans le sommaire de l'année, de l'aide et de la collaboration qu'ils lui ont apportées pour l'obtention des données sur les sédiments. On trouvera également les noms des organismes qui ont fourni des données dans l'*Index de référence des données sur les sédiments*.

## RÉVISIONS

On a corrigé ou révisé des données déjà publiées. Il a été nécessaire d'effectuer plusieurs corrections, car on a relevé des erreurs typographiques ou de calcul lorsqu'on a enregistré les données sur rubans magnétiques et qu'on a recalculé les moyennes mensuelles à l'aide d'un ordinateur. On a aussi relevé d'autres erreurs ou fait des interprétations différentes de certaines données de base au cours de la révision systématique des données historiques sur le débit, actuellement en cours.

Les corrections apportées aux débits journaliers ou aux données sur les sédiments ne sont pas publiées, du moins pour le moment. Cependant, les stations où on a effectué une révision systématique sont indiquées dans l'*Index de référence des données sur les eaux de surface*. Les publications intitulées *Sommaire chronologique de l'écoulement* contiennent des données révisées sur les débits mensuels et annuels moyens et les extrêmes annuels du débit. Les révisions, corrections ou ajouts apportés aux données sur les débits et sur les sédiments après le 1er janvier 1980 sont indiqués par la lettre R dans les résumés des données. On peut obtenir plus de détails sur les révisions en s'adressant au chef régional concerné.

## MICROFICHE

Toutes les données sur les sédiments sont disponibles sur microfiche en unités métriques. Ces données sont emmagasinées par ordre de numéro de station et par province. Chaque microfiche renferme 270 pages réduites de 48X. L'en-tête indique le numéro de la fiche, le genre de données, la province, le numéro de la première et de la dernière station, la première et la dernière année des données ainsi que le mois et l'année de création de la fiche. La dernière image donne l'index de la fiche.

## EQUIVALENTS OF MEASURE

The following list of convenient equivalents of measure includes the relationship between imperial units and the International System of Units (SI).

1 inch equals 2.54 cm (centimetres)
1 foot equals 0.3048 m (metre)
1 statute mile equals 1.6093 km (kilometres)

1 cm (centimetre) equals 0.393 70 inch
1 m (metre) equals 3.2808 feet
1 km (kilometre) equals 0.621 37 mile

1 acre equals 43 560 square feet
1 acre equals 0.404 69 ha (hectare)
1 square mile equals 640 acres
1 square mile equals 2.5900 $km^2$ (square kilometres)
1 square mile equals 259.0 ha (hectares)

1 ha (hectare) equals 10 000 $m^2$ (square metres)
1 ha (hectare) equals 2.4710 acres
1 $km^2$ (square kilometre) equals 0.386 10 square mile

1 cubic foot equals 6.2288 imperial gallons
1 imperial gallon equals 4.546 09 L (litres)
1 imperial gallon equals 1.2010 U.S. gallons
1 U.S. gallon equals 0.133 68 cubic foot
1 cubic foot equals 0.028 317 $m^3$ (cubic metre)
1 $m^3$ (cubic metre) equals 35.315 cubic feet
1 $dam^3$ (cubic decametre) equals 1000 $m^3$ (cubic metres)
1 $dam^3$ (cubic decametre) equals 1 mm (millimetre) over 1 $km^2$ (square kilometre)

1 cubic foot per second for one day equals 1.9835 acre-feet
1 cubic foot per second for one day covers one square mile to a depth of 0.037 19 inch
1 acre-foot equals 1.2335 $dam^3$ (cubic decametres)
1 $m^3/s$ (cubic metre per second) for one day equals 86.4 $dam^3$ (cubic decametre)
1 $m^3/s$ (cubic metre per second) for one day covers one square kilometre to a depth of 0.0864 m (metre)

1 foot per second equals 0.6818 mile per hour
1 mile per hour equals 1.467 feet per second
1 m/s (metre per second) equals 3.6 km/h (kilometre per hour)
1 km/h (kilometre per hour) equals 0.2778 m/s (metre per second)

1 cubic foot per second equals 0.028 317 $m^3/s$ (cubic metre per second)
1 $m^3/s$ (cubic metre per second) equals 35.315 cubic feet per second

1 pound equals 0.453 59 kg (kilogram)
1 kg (kilogram) equals 2.2046 pounds

1 short ton (2000 pounds) equals 0.907 18 t (tonne)
1 t (tonne) equals 2204.6 pounds

degrees Celsius = 5/9 (degrees Fahrenheit - 32)
degrees Fahrenheit = 9/5 (degrees Celsius) + 32

## ÉQUIVALENCES DES UNITÉS DE MESURE

Voici une liste des unités de mesure impériales et leurs équivalences dans le Système international d'unités (SI).

1 pouce vaut 2.54 cm (centimètres)
1 pied vaut 0.3048 m (mètre)
1 mille terrestre vaut 1.6093 km (kilomètre)

1 cm (centimètre) vaut 0.393 70 pouce
1 m (mètre) vaut 3.2808 pieds
1 km (kilomètre) vaut 0.621 37 mille

1 acre vaut 43 560 pieds carrés
1 acre vaut 0.404 69 ha (hectare)
1 mille carré vaut 640 acres
1 mille carré vaut 2.5900 $km^2$ (kilomètres carrés)
1 mille carré vaut 259.0 ha (hectares)

1 ha (hectare) vaut 10 000 $m^2$ (mètres carrés)
1 ha (hectare) vaut 2.4710 acres
1 $km^2$ (kilomètre carré) vaut 0.386 10 mille carré

1 pied cube vaut 6.2288 gallons impérials
1 gallon impérial vaut 4.546 09 L (litres)
1 gallon impérial vaut 1.2010 gallon américain
1 gallon américain vaut 0.133 68 pied cube
1 pied cube vaut 0.028 317 $m^3$ (mètre cube)
1 $m^3$ (mètre cube) vaut 35.315 pieds cubes
1 $dam^3$ (décamètre cube) vaut 1000 $m^3$ (mètres cubes)
1 $dam^3$ (décamètre cube) vaut 1 mm (millimètre) qui couvre 1 $km^2$ (kilomètre carré)

1 pied cube par seconde pendant un jour vaut 1.9835 acre-pied
1 pied cube par seconde pendant un jour couvre un volume d'un mille carré par 0.037 19 pouce
1 acre-pied vaut 1.2335 $dam^3$ (décamètre cube)
1 $m^3/s$ (mètre cube par seconde) pour un jour vaut 86.4 $dam^3$ (décamètres cubes)
1 $m^3/s$ (mètre cube par seconde) pour un jour couvre un kilomètre carré à une profondeur de 0.0864 m (mètre)

1 pied par seconde vaut 0.6818 mille par heure
1 mille par heure vaut 1.467 pied par seconde
1 m/s (mètre par seconde) vaut 3.6 km/h (kilomètres par heure)
1 km/h (kilomètre par heure) vaut 0.2778 m/s (mètre par seconde)

1 pied cube par seconde vaut 0.028 317 $m^3/s$ (mètre cube par seconde)
1 $m^3/s$ (mètre cube par seconde) vaut 35.315 pieds cubes par seconde

1 livre vaut 0.453 59 kg (kilogramme)
1 kg (kilogramme) vaut 2.2046 livres

1 tonne courte (2000 livres) vaut 0.907 18 t (tonne)
1 t (tonne) vaut 2204.6 livres

degrés Celsius = 5/9 (degrés Fahrenheit - 32)
degrés Fahrenheit = 9/5 (degrés Celsius) + 32

ALBERTA

ATHABASCA RIVER AT EMBARRAS AIRPORT - STATION NO. 07DD001

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 58 12 18 N LONG 111 23 24 W
DRAINAGE AREA: 155 000 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 4 676 530 TONNES FOR THE PERIOD MAY 21 TO OCT 31

REMARKS:

| | MAY | | | JUN | | | JUL | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 789 E | | | 1 250 | 845 | 91 300 | 1 280 | 227 | 24 700 | 1 |
| 2 | 781 E | | | 1 280 | 785 S | 85 400 | 1 310 | 228 S | 25 800 | 2 |
| 3 | 762 E | | | 1 630 | 772 S | 109 000 | 1 310 | 238 | 26 700 | 3 |
| 4 | 728 E | | | 2 070 | 809 S | 145 000 | 1 310 | 285 S | 30 000 | 4 |
| 5 | 718 E | | | 2 210 | 1 480 S | 283 000 | 1 440 | 287 | 33 200 | 5 |
| 6 | 713 E | | | 2 210 | 1 280 | 241 000 | 1 520 | 289 S | 37 700 | 6 |
| 7 | 714 E | | | 2 220 | 874 S | 186 000 | 1 500 | 275 | 38 000 | 7 |
| 8 | 717 E | | | 2 280 | 829 | 182 000 | 1 450 | 312 S | 39 100 | 8 |
| 9 | 728 E | | | 2 35 | 815 S | 185 000 | 1 370 | 320 | 37 800 | 9 |
| 10 | 726 E | | | 2 480 | 833 | 135 000 | 1 350 | 300 S | 35 000 | 10 |
| 11 | 724 E | | | 2 550 | 434 S | 95 800 | 1 370 | 291 | 34 400 | 11 |
| 12 | 725 E | | | 2 480 | 417 | 88 500 | 1 420 | 287 S | 35 200 | 12 |
| 13 | 751 E | | | 2 030 | 473 S | 83 000 | 1 500 | 227 | 29 400 | 13 |
| 14 | 749 E | | | 1 910 | 552 S | 91 300 | 1 480 | 185 S | 20 000 | 14 |
| 15 | 744 E | | | 1 900 | 808 | 100 000 | 1 400 | 185 | 20 000 | 15 |
| 16 | 749 E | | | 1 970 | 838 S | 107 000 | 1 320 | 184 S | 18 700 | 16 |
| 17 | 787 E | | | 2 080 | 517 | 82 900 | 1 270 | 189 | 18 800 | 17 |
| 18 | 833 E | | | 2 140 | 373 S | 88 000 | 1 280 | 188 S | 18 100 | 18 |
| 19 | 830 E | | | 2 120 | 276 | 80 800 | 1 280 | 147 | 18 000 | 19 |
| 20 | 834 E | | | 2 080 | 285 S | 47 800 | 1 280 | 99 S | 10 800 | 20 |
| 21 | 855 A | 58 | 4 880 | 2 020 | 271 | 47 300 | 1 220 | 85 | 8 980 | 21 |
| 22 | 775 | 157 S | 10 500 | 1 940 | 278 S | 46 800 | 1 170 | 107 S | 10 800 | 22 |
| 23 | 1 050 | 844 S | 85 800 | 1 830 | 273 | 43 200 | 1 130 | 163 | 14 900 | 23 |
| 24 | 1 500 | 887 S | 88 400 | 1 880 | 300 S | 43 500 | 1 120 | 180 S | 17 400 | 24 |
| 25 | 1 550 | 449 S | 60 100 | 1 520 | 284 | 38 800 | 1 120 | 200 | 19 400 | 25 |
| 26 | 1 510 | 420 | 54 800 | 1 380 | 230 S | 27 400 | 1 120 | 200 S | 19 400 | 26 |
| 27 | 1 460 | 479 S | 60 400 | 1 270 | 220 | 24 100 | 1 090 | 200 | 18 800 | 27 |
| 28 | 1 410 | 467 | 58 300 | 1 190 | 225 S | 23 100 | 1 030 | 209 S | 18 800 | 28 |
| 29 | 1 350 | 498 S | 58 100 | 1 150 | 229 | 22 800 | 959 | 150 | 12 400 | 29 |
| 30 | 1 310 | 663 | 78 000 | 1 190 | 226 S | 23 100 | 886 | 97 S | 7 440 | 30 |
| 31 | 1 270 | 941 S | 103 000 | | | | 837 | 88 | 7 090 | 31 |
| TOTAL | 29 138 | | 858 080 | 58 380 | | 2 780 000 | 38 254 | | 704 390 | TOTAL |

| | AUG | | | SEP | | | OCT | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 820 | 101 S | 7 180 | 878 | 58 | 3 400 | 892 | 72 | 5 170 | 1 |
| 2 | 818 | 110 | 7 780 | 884 | 83 | 3 780 | 940 | 82 S | 5 040 | 2 |
| 3 | 824 | 87 S | 6 190 | 701 | 89 | 4 180 | 888 | 87 | 5 130 | 3 |
| 4 | 880 | 87 | 6 610 | 709 | 80 S | 4 800 | 842 | 78 | 5 530 | 4 |
| 5 | 936 | 89 S | 7 200 | 780 | 132 | 8 900 | 807 | 82 | 5 720 | 5 |
| 6 | 909 | 73 | 5 730 | 788 | 178 | 12 100 | 771 | 90 S | 6 000 | 6 |
| 7 | 900 | 59 S | 4 590 | 744 | 142 | 9 130 | 748 | 81 | 5 230 | 7 |
| 8 | 915 | 60 | 4 740 | 711 | 75 S | 4 810 | 730 | 88 | 4 290 | 8 |
| 9 | 914 | 85 S | 6 130 | 682 | 61 | 3 590 | 719 | 84 | 3 900 | 9 |
| 10 | 928 | 78 | 6 320 | 675 | 80 | 3 500 | 710 | 80 S | 3 070 | 10 |
| 11 | 924 | 81 S | 7 280 | 706 | 58 | 3 540 | 725 | 80 | 3 140 | 11 |
| 12 | 924 | 82 | 7 340 | 725 | 70 S | 4 380 | 774 | 81 | 3 410 | 12 |
| 13 | 928 | 84 S | 7 640 | 748 | 75 | 4 830 | 829 | 83 | 3 800 | 13 |
| 14 | 955 | 89 | 8 170 | 830 | 77 | 5 520 | 831 | 85 S | 3 980 | 14 |
| 15 | 968 | 89 S | 8 280 | 928 | 80 | 8 420 | 813 | 88 | 3 930 | 15 |
| 16 | 933 | 81 | 7 340 | 852 | 82 S | 8 740 | 802 | 87 | 3 980 | 16 |
| 17 | 887 | 84 | 8 440 | 844 | 78 | 8 440 | 838 | 80 | 4 330 | 17 |
| 18 | 885 | 78 | 5 970 | 852 | 78 | 8 280 | 875 | 81 S | 4 610 | 18 |
| 19 | 868 | 76 S | 5 830 | 857 | 73 | 8 040 | 888 | 89 | 4 570 | 19 |
| 20 | 874 | 82 | 8 850 | 934 | 73 S | 5 890 | 918 | 84 | 4 280 | 20 |
| 21 | 857 | 110 | 8 140 | 888 | 83 | 8 380 | 939 | 51 | 4 180 | 21 |
| 22 | 838 | 128 | 9 180 | 848 | 95 | 8 980 | 948 | 51 S | 4 180 | 22 |
| 23 | 782 | 144 S | 8 880 | 813 | 104 | 7 310 | 980 | 52 | 4 310 | 23 |
| 24 | 788 | 143 | 8 380 | 781 | 113 S | 7 630 | 958 | 55 | 4 510 | 24 |
| 25 | 761 | 139 | 8 900 | 815 | 118 | 8 100 | 922 | 55 | 4 480 | 25 |
| 26 | 732 | 138 | 8 800 | 1 080 | 118 | 10 800 | 884 | 60 S | 4 580 | 26 |
| 27 | 731 | 131 S | 8 270 | 1 200 | 115 | 11 800 | 840 B | 61 | 4 430 | 27 |
| 28 | 712 | 113 | 8 880 | 1 200 | 112 S | 11 800 | 780 B | 178 | 11 800 | 28 |
| 29 | 893 | 82 | 8 510 | 1 140 | 88 | 8 750 | 850 B | 151 | 8 810 | 29 |
| 30 | 877 | 72 | 4 270 | 1 080 | 88 | 7 780 | 870 B | 84 | 4 140 | 30 |
| 31 | 870 | 86 S | 3 180 | | | | 800 B | 81 | 2 840 | 31 |
| TOTAL | 28 200 | | 214 780 | 25 843 | | 202 050 | 25 389 | | 147 250 | TOTAL |

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

ATHABASCA RIVER AT EMBARRAS AIRPORT - STATION NO. 07DD001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | | INSTANT. CONCENT. (mg/L) | | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 22 | 09:59 | 4.0 | | | 33 | | --- | | | | | | | | | | | | 186 | | | | D49 |
| APR 22 | 10:00 | 4.0 | | | 32 | | --- | | | | | | | | | | | | 200 | | | | D49 |
| APR 24 | 10:00 | 5.0 | | | 32 | | --- | | | | | | | | | | | | 215 | | | | D49 |
| APR 24 | 10:01 | 5.0 | | | 40 | | --- | | | | | | | | | | | | 200 | | | | D49 |
| APR 26 | 09:58 | 6.0 | | | 32 | | --- | | | | | | | | | | | | 190 | | | | D49 |
| APR 26 | 10:00 | 6.0 | | | 31 | | --- | | | | | | | | | | | | 208 | | | | D49 |
| APR 28 | 09:59 | 7.0 | | | 27 | | --- | | | | | | | | | | | | 198 | | | | D49 |
| APR 28 | 10:00 | 7.0 | | | 28 | | --- | | | | | | | | | | | | 201 | | | | D49 |
| APR 30 | 09:59 | 6.0 | | | 44 | | --- | | | | | | | | | | | | 198 | | | | D49 |
| APR 30 | 10:00 | 8.0 | | | 34 | | --- | | | | | | | | | | | | 196 | | | | D49 |
| MAY 02 | 09:59 | 9.0 | 781 | E | 34 | | --- | | | | | | | | | | | | 197 | | | | D49 |
| MAY 02 | 10:00 | 9.0 | 781 | E | 43 | | --- | | | | | | | | | | | | 200 | | | | D49 |
| MAY 04 | 09:59 | 9.0 | 728 | E | 29 | | --- | | | | | | | | | | | | 198 | | | | D49 |
| MAY 04 | 10:00 | 9.0 | 728 | E | 35 | | --- | | | | | | | | | | | | 192 | | | | D49 |
| MAY 06 | 09:59 | 9.0 | 713 | E | 35 | | --- | | | | | | | | | | | | 180 | | | | D49 |
| MAY 06 | 10:00 | 9.0 | 713 | E | 36 | | --- | | | | | | | | | | | | 191 | | | | D49 |
| MAY 08 | 09:59 | 9.0 | 717 | E | 31 | | --- | | | | | | | | | | | | 192 | | | | D49 |
| MAY 08 | 10:00 | 9.0 | 717 | E | 33 | | --- | | | | | | | | | | | | 188 | | | | D49 |
| MAY 10 | 09:59 | 9.0 | 726 | E | 33 | | --- | | | | | | | | | | | | 191 | | | | D49 |
| MAY 10 | 10:00 | 9.0 | 726 | E | 32 | | --- | | | | | | | | | | | | 183 | | | | D49 |
| MAY 12 | 10:00 | 9.0 | 725 | E | 32 | | --- | | | | | | | | | | | | 178 | | | | D49 |
| MAY 14 | 10:00 | 10.0 | 749 | E | 58 | | --- | | | | | | | | | | | | | | | | D49 |
| MAY 16 | 10:00 | 11.0 | 748 | E | 27 | | --- | | | | | | | | | | | | 182 | | | | D49 |
| MAY 18 | 10:00 | 10.0 | 833 | E | 34 | | --- | | | | | | | | | | | | | | | | D49 |
| MAY 20 | 10:00 | 11.0 | 834 | E | 84 | | --- | | | | | | | | | | | | | | | | D49 |
| MAY 22 | 10:00 | 12.0 | 772 | | 85 | | --- | | | | | | | | | | | | | | | | D49 |
| MAY 23 | 10:00 | 12.0 | 898 | | 1080 | | --- | | | | | | | | | | | | | | | | D49 |
| MAY 24 | 10:00 | 13.0 | 1510 | | 661 | | --- | | | | | | | | | | | | 152 | | | | D49 |
| MAY 25 | 10:00 | 13.0 | 1580 | | 449 | | --- | | | | | | | | | | | | | | | | D49 |
| MAY 27 | 10:00 | 14.0 | 1470 | | 486 | | --- | | | | | | | | | | | | | | | | D49 |
| MAY 29 | 10:00 | 14.0 | 1380 | | 488 | | --- | | | | | | | | | | | | 177 | | | | D49 |
| MAY 31 | 10:00 | 14.0 | 1270 | | 999 | | --- | | | | | | | | | | | | 166 | | | | D49 |
| JUN 02 | 10:00 | 13.0 | 1270 | | 783 | | --- | | | | | | | | | | | | | | | | D48 |
| JUN 03 | 10:00 | 12.0 | 1880 | | 783 | | --- | | | | | | | | | | | | 188 | | | | D48 |
| JUN 04 | 10:00 | 12.0 | 2080 | | 722 | | --- | | | | | | | | | | | | 185 | | | | D49 |
| JUN 05 | 10:00 | 12.0 | 2200 | | 1600 | | --- | | | | | | | | | | | | 158 | 4 | 57 | 39 | D49 |
| JUN 07 | 10:00 | 14.0 | 2210 | | 853 | | --- | 34 | 39 | 59 | 67 | 83 | 95 | 98 | 100 | | | | 178 | 4 | 58 | 38 | D49 |
| JUN 09 | 10:00 | 15.0 | 2340 | | 849 | | --- | 27 | 36 | 55 | 69 | 86 | 96 | 99 | 100 | | | | | | | | D49 |
| JUN 11 | 10:00 | 17.0 | 2550 | | 418 | | --- | | | | | | | | | | | | | | | | D49 |
| JUN 13 | 10:00 | 18.0 | 2030 | | 471 | | --- | | | | | | | | | | | | 159 | | | | D49 |
| JUN 14 | 10:00 | 19.0 | 1930 | | 556 | | --- | | | | | | | | | | | | | | | | D49 |
| JUN 16 | 10:00 | 18.0 | 1960 | | 853 | | --- | | | | | | | | | | | | | | | | D49 |
| JUN 18 | 10:00 | 16.0 | 2150 | | 393 | | --- | | | | | | | | | | | | 157 | | | | D49 |
| JUN 20 | 10:00 | 19.0 | 2090 | | 287 | | --- | | | | | | | | | | | | | | | | D49 |
| JUN 22 | 10:00 | 19.0 | 1960 | | 284 | | --- | | | | | | | | | | | | | | | | D49 |
| JUN 24 | 10:00 | 19.0 | 1700 | | 305 | | --- | | | | | | | | | | | | | | | | D49 |
| JUN 26 | 10:00 | 20.0 | 1400 | | 231 | | --- | | | | | | | | | | | | 159 | | | | D49 |
| JUN 28 | 10:00 | 21.0 | 1200 | | 224 | C | --- | | | | | | | | | | | | | | | | D49 |
| JUN 30 | 10:00 | 20.0 | 1180 | | 225 | C | --- | | | | | | | | | | | | 185 | | | | D48 |
| JUL 02 | 10:00 | 20.0 | 1310 | | 233 | | --- | | | | | | | | | | | | 145 | | | | D48 |
| JUL 04 | 09:59 | 15.0 | 1300 | | 256 | | --- | | | | | | | | | | | | 155 | | | | D48 |
| JUL 04 | 10:00 | 15.0 | 1300 | | 275 | | --- | | | | | | | | | | | | 142 | | | | D48 |
| JUL 06 | 09:59 | 15.0 | 1820 | | 260 | | --- | | | | | | | | | | | | 154 | | | | D48 |
| JUL 06 | 10:00 | 15.0 | 1820 | | 292 | | --- | | | | | | | | | | | | 150 | | | | D48 |
| JUL 08 | 09:59 | 15.0 | 1460 | | 285 | | --- | | | | | | | | | | | | 154 | | | | D48 |
| JUL 08 | 10:00 | 15.0 | 1460 | | 338 | | --- | | | | | | | | | | | | 162 | | | | D48 |
| JUL 10 | 09:59 | 14.4 | 1380 | | 324 | | --- | | | | | | | | | | | | 171 | | | | D48 |
| JUL 10 | 10:00 | 14.4 | 1380 | | 288 | | --- | | | | | | | | | | | | 165 | | | | D48 |
| JUL 12 | 09:59 | 14.4 | 1410 | | 304 | | --- | | | | | | | | | | | | 158 | | | | D48 |
| JUL 12 | 10:00 | 14.4 | 1410 | | 293 | | --- | | | | | | | | | | | | 151 | | | | D48 |
| JUL 14 | 09:59 | 15.0 | 1500 | | 156 | | --- | | | | | | | | | | | | 150 | | | | D48 |
| JUL 14 | 10:00 | 15.0 | 1500 | | 147 | | --- | | | | | | | | | | | | 146 | | | | D48 |
| JUL 16 | 09:59 | 15.0 | 1320 | | 185 | | --- | | | | | | | | | | | | 151 | | | | D48 |
| JUL 16 | 10:00 | 15.0 | 1320 | | 155 | | --- | | | | | | | | | | | | 149 | | | | D48 |
| JUL 18 | 09:59 | 15.0 | 1280 | | 170 | | --- | | | | | | | | | | | | 149 | | | | D48 |
| JUL 18 | 10:00 | 15.0 | 1280 | | 165 | | --- | | | | | | | | | | | | 149 | | | | D48 |
| JUL 20 | 09:59 | 15.8 | 1260 | | 83 | | --- | | | | | | | | | | | | 143 | | | | D48 |
| JUL 20 | 10:00 | 15.8 | 1260 | | 108 | | --- | | | | | | | | | | | | 157 | | | | D48 |
| JUL 22 | 09:59 | 16.1 | 1170 | | 113 | | --- | | | | | | | | | | | | 178 | | | | D48 |
| JUL 22 | 10:00 | 16.1 | 1170 | | 87 | | --- | | | | | | | | | | | | 191 | | | | D49 |
| JUL 24 | 10:00 | 16.7 | 1120 | | 178 | C | --- | | | | | | | | | | | | | | | | D49 |
| JUL 26 | 10:00 | 16.3 | 1130 | | 203 | C | --- | | | | | | | | | | | | | | | | D49 |
| JUL 28 | 10:00 | 20.0 | 1030 | | 221 | C | --- | | | | | | | | | | | | 151 | | | | D49 |
| JUL 30 | 10:00 | 20.0 | 891 | | 94 | | --- | | | | | | | | | | | | | | | | D49 |
| AUG 01 | 10:00 | 20.0 | 825 | | 102 | | --- | | | | | | | | | | | | | | | | D49 |
| AUG 03 | 10:00 | 20.6 | 819 | | 81 | | --- | | | | | | | | | | | | | | | | D49 |
| AUG 05 | 10:00 | 21.1 | 863 | | 95 | | --- | | | | | | | | | | | | 151 | | | | D49 |
| AUG 07 | 10:00 | 18.3 | 884 | | 55 | | --- | | | | | | | | | | | | | | | | D49 |
| AUG 09 | 10:00 | 17.8 | 914 | | 65 | | --- | | | | | | | | | | | | | | | | D49 |
| AUG 11 | 10:00 | 18.7 | 923 | | 93 | | --- | | | | | | | | | | | | | | | | D49 |
| AUG 13 | 10:00 | 18.6 | 928 | | 93 | | --- | | | | | | | | | | | | 181 | | | | D49 |
| AUG 15 | 10:00 | 15.5 | 966 | | 87 | | --- | | | | | | | | | | | | | | | | D49 |
| AUG 19 | 10:00 | 15.6 | 890 | | 71 | | --- | | | | | | | | | | | | 183 | | | | D49 |
| AUG 23 | 10:00 | 15.8 | 795 | | 144 | | --- | | | | | | | | | | | | | | | | D49 |
| AUG 27 | 10:00 | 15.0 | 732 | | 137 | C | --- | | | | | | | | | | | | 175 | | | | D49 |
| AUG 31 | 10:00 | 11.1 | 670 | | 49 | | --- | | | | | | | | | | | | | | | | D49 |
| SEP 04 | 10:00 | 8.8 | 702 | | 74 | | --- | | | | | | | | | | | | 174 | | | | D49 |
| SEP 08 | 10:00 | 7.2 | 712 | | 70 | | --- | | | | | | | | | | | | | | | | D49 |
| SEP 12 | 10:00 | 5.5 | 724 | | 70 | | --- | | | | | | | | | | | | 188 | | | | D49 |
| SEP 16 | 10:00 | 6.7 | 853 | | 83 | C | --- | | | | | | | | | | | | 185 | | | | D49 |
| SEP 20 | 09:59 | 6.7 | 838 | | 74 | | --- | | | | | | | | | | | | 184 | | | | D49 |
| SEP 20 | 10:00 | 6.7 | 838 | | 88 | | --- | | | | | | | | | | | | 170 | | | | D49 |
| SEP 24 | 09:58 | 5.6 | 782 | | 118 | | --- | | | | | | | | | | | | 173 | | | | D48 |
| SEP 24 | 10:00 | 5.6 | 782 | | 104 | | --- | | | | | | | | | | | | 172 | | | | D48 |
| SEP 28 | 09:58 | 3.8 | 1210 | | 108 | | --- | | | | | | | | | | | | 178 | | | | D49 |
| SEP 28 | 10:00 | 3.8 | 1210 | | 110 | | --- | | | | | | | | | | | | 187 | | | | D49 |
| OCT 02 | 09:59 | 2.2 | 944 | | 82 | | --- | | | | | | | | | | | | 186 | | | | D49 |
| OCT 02 | 10:00 | 2.2 | 944 | | 55 | | --- | | | | | | | | | | | | 179 | | | | D49 |
| OCT 06 | 10:00 | 2.2 | 772 | | 88 | | --- | | | | | | | | | | | | 180 | | | | D49 |
| OCT 10 | 10:00 | 4.4 | 709 | | 48 | | --- | | | | | | | | | | | | 186 | | | | D49 |
| OCT 14 | 09:59 | 1.7 | 832 | | 93 | | --- | | | | | | | | | | | | 181 | | | | D49 |
| OCT 14 | 10:00 | 1.7 | 832 | | 91 | | --- | | | | | | | | | | | | | | | | D49 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

DISCHARGE SYMBOL(S): E - ESTIMATED
CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

CONTINUED

ATHABASCA RIVER AT EMBARRAS AIRPORT - STATION NO. 07DD001 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 18 | 09:59 | 0.1 | 874 | 81 | --- | | | | | | | | | | | | 172 | | | | D49 |
| OCT 18 | 10:00 | 0.1 | 874 | 82 | --- | | | | | | | | | | | | 188 | | | | D49 |
| OCT 22 | 09:58 | 0.0 | 847 | 48 | --- | | | | | | | | | | | | 184 | | | | D49 |
| OCT 22 | 10:00 | 0.0 | 847 | 48 | --- | | | | | | | | | | | | 180 | | | | D49 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

ATHABASCA RIVER AT EMBARRAS AIRPORT - STATION NO. 07DD001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | | MINIMUM (mg/L) | | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | | TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAY-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | MAY-DEC # | M-MS | 1 490 | JUN 14 | | 4 | DEC 08 | * | | | --- | | --- | --- | --- | --- |
| 1972 | APR-JUL # | M-MS | 355 | MAY 18 | | 13 | APR 13 | | | | --- | | --- | --- | --- | --- |
| 1973 | MAY-SEP # | M-MS | 313 | APR 29 | | 7 | JUL 05 | | | | --- | | --- | --- | --- | --- |
| 1974 | JUN-SEP # | M-S | 922 | JUL 19 | | 98 | SEP 13 | | 228 000 | JUL 19 | | 2 880 000 | | --- | --- | --- |
| 1976 | MAY-OCT | M-S | 588 | AUG 31 | | 38 | OCT 22 | | 98 100 | SEP 01 | | 3 400 000 | | 18 500 | 18 500 | --- |
| 1977 | APR-OCT | M-S | 871 | MAY 15 | | 32 | OCT 03 | | 292 000 | JUN 05 | | 5 840 000 | | 30 200 | 24 600 | 24.0 |
| 1978 | MAY-NOV | M-S | 882 | JUN 23 | | 27 | NOV 04 | | 120 000 | JUN 23 | | 4 430 000 | | 23 800 | 24 200 | 14.0 |
| 1979 | MAY-NOV | M-S | 842 | JUN 21 | | 10 | NOV 03 | | 172 000 | JUN 20 | | 4 480 000 | | --- | --- | --- |
| 1980 | APR-NOV # | M-S | 2 250 | JUN 10 | | 18 | NOV 02 | | 739 000 | JUN 10 | * | 7 050 000 | * | 38 100 | 27 700 | 15.3 |
| 1981 | MAY-SEP | M-S | 234 | MAY 08 | | 41 | SEP 21 | | 30 700 | JUN 10 | | 1 130 000 | | --- | --- | --- |
| 1982 | MAY-OCT | M-S | 2 770 | JUL 09 | * | 21 | OCT 20 | | 805 000 | JUL 10 | | 8 980 000 | | 37 800 | 29 700 | 13.0 |
| 1983 | MAY-NOV | M-S | 822 | JUL 01 | | 7 | NOV 02 | | 98 300 | JUL 01 | | 2 150 000 | | 11 700 | 28 700 | 18.3 |
| 1984 | APR-OCT | M-S | 1 800 | JUN 05 | | 27 | APR 28 | | 283 000 | JUN 05 | | 4 880 000 | | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

ATHABASCA RIVER AT MCMURRAY - STATION NO. 07CC002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 20 | 14:45 | 9.0 | 345 | 87 | | MID | | | | | | | | | | | | 209 | | | | D49 |
| APR 20 | 14:45 | 9.0 | 348 | 78 | | MID | | | | | | | | | | | | 188 | | | | D49 |
| APR 22 | 17:00 | 8.0 | 335 | 50 | | MID | | | | | | | | | | | | | | | | D49 |
| MAY 08 | 21:00 | 10.0 | 348 | 32 | | MID | | | | | | | | | | | | 180 | | | | D49 |
| MAY 13 | 18:00 | 12.0 | 383 | 33 | | MID | | | | | | | | | | | | | | | | D49 |
| MAY 16 | 20:00 | 8.0 | 452 | 58 | | MID | | | | | | | | | | | | 166 | | | | D49 |
| MAY 24 | 21:00 | 9.0 | 936 | 885 | | MID | | | | | | | | | | | | 162 | | | | D49 |
| MAY 24 | 21:01 | 9.0 | 936 | 845 | | MID | | | | | | | | | | | | | | | | D49 |
| MAY 28 | 20:15 | 12.0 | 783 | 203 | | MID | | | | | | | | | | | | 184 | | | | D49 |
| JUN 01 | 15:00 | 12.0 | 785 | 252 | | MID | | | | | | | | | | | | 161 | | | | D49 |
| JUN 04 | 17:00 | 10.0 | 1260 | 808 | | MID | | | | | | | | | | | | 148 | | | | D49 |
| JUN 25 | 17:25 | 20.0 | 920 | 198 | | MID | | | | | | | | | | | | 150 | | | | D49 |
| JUN 25 | 17:25 | 20.0 | 930 | 181 | | MID | | | | | | | | | | | | 147 | | | | D49 |
| JUN 26 | 18:00 | 20.0 | 930 | 162 | | MID | | | | | | | | | | | | 132 | | | | D49 |
| JUN 26 | 18:01 | 20.0 | 930 | 170 | | MID | | | | | | | | | | | | 157 | | | | D49 |
| JUN 29 | 22:00 | 20.0 | 1070 | 167 | | MID | | | | | | | | | | | | 152 | | | | D49 |
| JUN 29 | 22:01 | 20.0 | 1070 | 185 | | MID | | | | | | | | | | | | 158 | | | | D49 |
| JUN 30 | 18:30 | 18.0 | 1120 | 222 | | MID | | | | | | | | | | | | 147 | | | | D49 |
| JUN 30 | 18:31 | 18.0 | 1120 | 206 | | MID | | | | | | | | | | | | 139 | | | | D49 |
| JUL 04 | 13:45 | 19.0 | 1430 | 342 | C | MID | | | | | | | | | | | | 131 | | | | D49 |
| JUL 04 | 13:46 | 19.0 | 1430 | 385 | C | MID | | | | | | | | | | | | 143 | | | | D49 |
| JUL 15 | 18:30 | 20.0 | 914 | 202 | C | MID | | | | | | | | | | | | 141 | | | | D49 |
| JUL 15 | 18:31 | 20.0 | 914 | 211 | C | MID | | | | | | | | | | | | 145 | | | | D49 |
| JUL 18 | 18:45 | 22.0 | 946 | 114 | C | MID | | | | | | | | | | | | 143 | | | | D49 |
| JUL 18 | 18:46 | 22.0 | 946 | 114 | C | MID | | | | | | | | | | | | 151 | | | | D49 |
| JUL 21 | 18:17 | 20.0 | 840 | 80 | | MID | | | | | | | | | | | | 144 | | | | D49 |
| JUL 21 | 18:18 | 20.0 | 840 | 57 | | MID | | | | | | | | | | | | 142 | | | | D49 |
| JUL 23 | 20:18 | 19.0 | 858 | 43 | | MID | | | | | | | | | | | | 142 | | | | D49 |
| JUL 23 | 20:19 | 19.0 | 858 | 45 | | MID | | | | | | | | | | | | 141 | | | | D49 |
| AUG 02 | 16:29 | 21.0 | 740 | 42 | | MID | | | | | | | | | | | | 148 | | | | D49 |
| AUG 02 | 16:30 | 21.0 | 740 | 41 | | MID | | | | | | | | | | | | 138 | | | | D49 |
| AUG 07 | 16:57 | 22.0 | 708 | 124 | C | MID | | | | | | | | | | | | 145 | | | | D49 |
| AUG 07 | 16:58 | 22.0 | 708 | 107 | C | MID | | | | | | | | | | | | 138 | | | | D49 |
| AUG 10 | 09:00 | 21.0 | 681 | 80 | | MID | | | | | | | | | | | | 135 | | | | D49 |
| AUG 10 | 09:01 | 21.0 | 681 | 93 | | MID | | | | | | | | | | | | 160 | | | | D49 |
| AUG 14 | 16:45 | 20.0 | 630 | 84 | | MID | | | | | | | | | | | | 146 | | | | D49 |
| AUG 14 | 16:46 | 20.0 | 630 | 78 | | MID | | | | | | | | | | | | 151 | | | | D49 |
| AUG 15 | 12:27 | 20.0 | 589 | 56 | | MID | | | | | | | | | | | | 153 | | | | D49 |
| AUG 15 | 12:28 | 20.0 | 589 | 46 | | MID | | | | | | | | | | | | 169 | | | | D49 |
| AUG 31 | 14:25 | 19.0 | 502 | 43 | | MID | | | | | | | | | | | | 165 | | | | D49 |
| AUG 31 | 14:26 | 19.0 | 502 | 20 | | MID | | | | | | | | | | | | | | | | |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

ATHABASCA RIVER AT MCMURRAY - STATION NO. 07CC002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1973 | JAN-OCT # | M-S | 4 040 | JUN 17 * | | 14 | FEB 28 | *** | *** | *** | *** | *** |
| 1974 | JAN-OCT | M-S | 1 330 | JUL 17 | | 16 | OCT 11 | *** | *** | *** | *** | *** |
| 1975 | JAN-OCT # | M-S | 1 500 | JUL 02 | | 7 | MAR 15 | *** | *** | *** | *** | *** |
| 1976 | JAN-OCT | M-S | 1 210 | AUG 23 | | 8 | JAN 16 | *** | *** | *** | *** | *** |
| 1977 | APR-OCT | M-S | 1 920 | JUN 03 | | 20 | OCT 24 | *** | *** | *** | *** | *** |
| 1978 | JAN-DEC | M-S | 1 600 | JUN 20 | | 8 | FEB 03 * | *** | *** | *** | *** | *** |
| 1979 | MAR-NOV # | M-S | 1 820 | JUN 18 | | 5 | MAR 19 | | | | | |
| 1980 | MAY-OCT | M-S | 820 | AUG 07 | | 32 | OCT 10 | *** | *** | *** | *** | *** |
| 1981 | MAY-SEP | M-S | 599 | JUN 07 | | 15 | SEP 16 | *** | *** | *** | *** | *** |
| 1982 | MAY-SEP | M-S | 2 980 | JUL 08 | | 52 | SEP 01 | *** | *** | *** | *** | *** |
| 1983 | MAY-SEP # | M-S | 45 | JUN 07 | | 4 | SEP 08 | *** | *** | *** | *** | *** |
| 1984 | APR-AUG | M-S | 849 | MAY 24 | | 20 | AUG 31 | *** | *** | *** | *** | *** |

M - MANUAL SAMPLING

S - SEASONAL OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

ATHABASCA RIVER BELOW MCMURRAY - STATION NO. 07DA001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY - JAN-DEC MEAN LOAD (TONNES) | SUMMARY - JAN-DEC HISTORICAL MEAN LOAD (TONNES) | SUMMARY - JAN-DEC STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | MAY-DEC # | M-MS | 405 | MAY 11 | 6 | DEC 12 | --- | | --- | | --- | --- | --- |
| 1968 | JAN-DEC # | M-MS | 268 | MAY 02 | 5 | MAR 21 | --- | | --- | | --- | --- | --- |
| 1969 | JAN-OCT # | M-S | 3 520 | AUG 11 | 1 | JAN 17 * | 845 000 | AUG 11 | 5 480 000 | | --- | --- | --- |
| 1970 | JAN-DEC | M-C | 4 620 | JUL 02 * | 3 | JAN 28 | 1 520 000 | JUL 02 * | 12 200 000 | | 33 500 | 33 500 | --- |
| 1971 | JAN-DEC | M-C | 3 400 | JUL 15 | 3 | MAR 02 | 875 000 | JUL 15 | 14 500 000 | * | 39 800 | 36 700 | 8.6 |
| 1972 | JAN-DEC | M-C | 2 340 | JUN 30 | 3 | JAN 21 | 732 000 | JUN 30 | 9 920 000 | | 27 100 | 33 500 | 10.9 |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ATHABASCA RIVER NEAR WINDFALL - STATION NO. 07AE001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 02 | 11:15 | 7.0 | 113 | 9 | 82.0 | | | | | | | | | | | | 236 | | | | DH59 |
| JUL 03 | 18:00 | 12.0 | 648 | 201 | 56.0 | | | | | | | | | | | | 132 | | | | DH59 |
| JUL 24 | 11:30 | 14.0 | 393 | 58 | --- | | | | | | | | | | | | 150 | | | | --- |
| JUL 24 | 11:31 | 14.0 | 393 | 55 | --- | | | | | | | | | | | | 155 | | | | --- |

NOTE : SINGLE VERTICAL IS UNDETERMINED

ATHABASCA RIVER NEAR WINDFALL - STATION NO. 07AE001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | AUG-SEP # | M-MS | 31 | AUG 28 | 6 | SEP 25 | --- | --- | | --- | --- | --- |
| 1975 | MAY-SEP # | M-MS | 89 | JUN 17 | 5 | SEP 25 | --- | --- | | --- | --- | --- |
| 1976 | APR-SEP # | M-MS | 238 | JUN 23 | 10 | SEP 23 | --- | --- | | --- | --- | --- |
| 1977 | MAY-SEP # | M-MS | 195 | JUN 22 | 20 | SEP 28 | --- | --- | | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 513 | JUN 06 | 5 | OCT 31 * | --- | --- | | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 832 | MAY 29 | 7 | OCT 30 | --- | --- | | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 1 810 | JUN 08 * | 11 | OCT 15 | --- | --- | | --- | --- | --- |
| 1981 | APR-OCT # | M-MS | 80 | MAY 19 | 6 | OCT 07 | --- | --- | | --- | --- | --- |
| 1982 | JUN-SEP # | M-MS | 694 | JUL 07 | 34 | SEP 28 | --- | --- | | --- | --- | --- |
| 1983 | JUN-SEP # | M-MS | 87 | JUN 08 | 8 | SEP 27 | --- | --- | | --- | --- | --- |
| 1984 | MAY-JUL | M-MS | 301 | JUL 03 | 9 | MAY 02 | --- | --- | | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

BATTLE RIVER NEAR THE SASKATCHEWAN BOUNDARY - STATION NO. 05FE004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s.) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 12 | 10:15 | 6.0 | 15.0 | 128 | 40.0 | | | | | | | | | | | | 488 | | | | DH59 |
| MAY 02 | 13:10 | 11.0 | 7.55 | 28 | 40.0 | | | | | | | | | | | | 582 | | | | DH59 |
| MAY 30 | 14:00 | 16.0 | 4.05 | 59 | MID X | | | | | | | | | | | | 584 | | | | DH48 |
| JUL 04 | 13:45 | 22.0 | 4.22 | 38 | MID X | | | | | | | | | | | | 808 | | | | DH48 |
| JUL 31 | 13:40 | 25.0 | 1.77 | 16 | MID X | | | | | | | | | | | | 813 | | | | DH48 |
| SEP 06 | 12:20 | 14.0 | 0.505 | 19 | MID X | | | | | | | | | | | | 739 | | | | DH48 |
| OCT 03 | 11:50 | 9.0 | 4.26 | 132 | MID X | | | | | | | | | | | | 554 | | | | DH48 |

NOTE : SINGLE VERTICAL LOCATED AT 40.0 METRES

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

BATTLE RIVER NEAR THE SASKATCHEWAN BOUNDARY - STATION NO. 05FE004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | TOTAL FOR PERIOD (TONNES) | | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1980 | APR-NOV # | M-MS | 714 | APR 18 | 17 | JUN 25 | --- | | --- | | --- | --- | --- |
| 1981 | APR-NOV # | M-S | 282 | APR 08 | 7 | JUL 28 * | 987 | APR 05 * | 13 400 * | | --- | --- | --- |
| 1982 | APR-NOV # | M-MS | 1 280 | MAY 10 * | 35 | JUL 07 | --- | | --- | | --- | --- | --- |
| 1983 | APR-NOV # | M-MS | 480 | APR 13 | 7 | NOV 01 | --- | | --- | | --- | --- | --- |
| 1984 | APR-OCT | M-MS | 132 | OCT 03 | 18 | JUL 31 | --- | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

BEARBERRY CREEK NEAR SUNDRE - STATION NO. 05CA011

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1977 | APR-JUN # | M-MS | 302 | MAY 30 * | 98 | JUN 18 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

BEAVER CREEK NEAR BROCKET - STATION NO. 05AB013

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-JUN # | M-MS | 1 490 | MAY 25 * | 42 | MAY 04 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

BEAVER RIVER ABOVE SYNCRUDE - STATION NO. 07DA018

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-SEP # | M-MS | 232 SEP 07 * | | 11 APR 05 | | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 198 APR 18 | | 6 SEP 22 * | | --- | --- | --- | --- | --- |
| 1978 | MAY-OCT # | M-MS | 74 MAY 02 | | 8 OCT 18 | | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 18 APR 24 | | 7 OCT 24 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

BEAVER RIVER AT COLD LAKE RESERVE - STATION NO. 05AD005

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 07 | 12:40 | 1.0 | 21.8 | 74 | MID | | | | | | | | | | | | | 207 | | | | DH59 |
| APR 07 | 12:45 | 1.0 | 21.8 | 83 | MID | | | | | | | | | | | | | 208 | | | | DH59 |
| MAY 03 | 15:25 | 10.5 | 8.52 | 8 | MID | | | | | | | | | | | | | 227 | | | | DH48 |
| MAY 03 | 15:30 | 10.5 | 8.52 | 7 | MID | | | | | | | | | | | | | 223 | | | | DH48 |
| AUG 01 | 10:00 | 22.5 | 8.67 | 9 | 10RB | X | | | | | | | | | | | | 204 | | | | DH48 |
| AUG 01 | 10:01 | 22.5 | 8.67 | 12 | 10RB | X | | | | | | | | | | | | 205 | | | | DH48 |
| OCT 02 | 13:00 | 7.5 | 8.45 | 5 | MID | | | | | | | | | | | | | 224 | | | | DH48 |
| OCT 02 | 13:01 | 7.5 | 8.45 | 5 | MID | | | | | | | | | | | | | 227 | | | | DH48 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

BEAVER RIVER AT COLD LAKE RESERVE - STATION NO. 05AD005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | AUG-SEP # | M-MS | 18 SEP 24 | | 17 AUG 14 | | --- | --- | --- | --- | --- |
| 1975 | APR-SEP # | M-MS | 388 APR 26 * | | 22 SEP 30 | | --- | --- | --- | --- | --- |
| 1976 | APR-SEP # | M-MS | 152 APR 13 | | 10 MAY 18 | | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 109 APR 19 | | 11 SEP 08 | | --- | --- | --- | --- | --- |
| 1978 | APR-NOV # | M-MS | 295 JUN 03 | | 5 AUG 21 | | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 278 MAY 01 | | 7 OCT 30 | | --- | --- | --- | --- | --- |
| 1980 | APR-SEP # | M-MS | 102 APR 22 | | 11 JUL 15 | | --- | --- | --- | --- | --- |
| 1981 | APR-SEP # | M-MS | 43 APR 23 | | 3 SEP 10 * | | --- | --- | --- | --- | --- |
| 1982 | MAY-SEP # | M-MS | 41 MAY 11 | | 5 SEP 22 | | --- | --- | --- | --- | --- |
| 1983 | APR-OCT # | M-MS | 42 APR 18 | | 8 OCT 28 | | --- | --- | --- | --- | --- |
| 1984 | APR-OCT | M-MS | 83 APR 07 | | 5 OCT 02 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

BEAVER RIVER NEAR FORT MACKAY - STATION NO. 07DA005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | OCT-OCT | M-MS | 14 | OCT 07 | 14 | OCT 07 * | --- | --- | --- | --- | --- |
| 1975 | APR-AUG # | M-MS | 111 | APR 21 * | 31 | AUG 06 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE  * - EXTREME FOR PERIOD OF RECORD

BELLY RIVER NEAR STAND OFF - STATION NO. 05AD002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 27 | 11:20 | 3.0 | 1.29 | 5 | MID | | | | | | | | | | | | 301 | | | | DH48 |
| MAY 01 | 13:05 | 8.0 | 2.03 | 13 | MID | | | | | | | | | | | | 333 | | | | DH48 |
| MAY 28 | 10:40 | 12.0 | 2.46 | 11 | MID | | | | | | | | | | | | 223 | | | | DIP |
| JUN 26 | 10:30 | 17.0 | 4.84 | 27 | MID | | | | | | | | | | | | 162 | | | | DH48 |
| JUL 31 | 10:55 | 18.0 | 2.30 | 16 | MID | | | | | | | | | | | | 213 | | | | DIP |
| AUG 27 | 10:20 | 14.0 | 0.778 | 6 | MID | | | | | | | | | | | | 238 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

BELLY RIVER NEAR STAND OFF - STATION NO. 05AD002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | JUL-NOV # | M-MS | 53 | JUL 30 | 4 | SEP 25 | --- | --- | --- | --- | --- |
| 1975 | FEB-OCT # | M-MS | 14 700 | JUN 23 * | 10 | FEB 24 | --- | --- | --- | --- | --- |
| 1976 | APR-OCT # | M-MS | 187 | MAY 31 | 4 | SEP 14 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 150 | AUG 30 | 8 | SEP 29 | --- | --- | --- | --- | --- |
| 1978 | APR-NOV # | M-MS | 883 | JUN 01 | 5 | SEP 28 | --- | --- | --- | --- | --- |
| 1979 | APR-OCT # | M-MS | 1 850 | MAY 28 | 3 | OCT 31 | --- | --- | --- | --- | --- |
| 1980 | MAR-NOV # | M-MS | 100 | MAR 12 | 8 | OCT 21 | --- | --- | --- | --- | --- |
| 1981 | MAR-NOV # | M-MS | 85 | JUN 25 | 8 | AUG 24 | --- | --- | --- | --- | --- |
| 1982 | APR-AUG # | M-MS | 468 | JUN 23 | 3 | JUL 21 | --- | --- | --- | --- | --- |
| 1983 | APR-NOV # | M-MS | 489 | MAY 30 | 2 | NOV 01 * | --- | --- | --- | --- | --- |
| 1984 | MAR-AUG | M-MS | 27 | JUN 26 | 6 | MAR 27 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE  * - EXTREME FOR PERIOD OF RECORD

BIG POINT CHANNEL BELOW DIVERGENCE - STATION NO. 07DD008

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | MAY-DEC # | M-MS | 1 510 | JUN 17 | 3 | DEC 21 * | --- | --- | --- | --- | --- |
| 1972 | JUL-AUG # | M-MS | 821 | JUL 07 | 90 | AUG 08 | --- | --- | --- | --- | --- |
| 1973 | JUN-OCT # | M-MS | 313 | APR 28 | 7 | JUL 05 | --- | --- | --- | --- | --- |
| 1974 | JUN-OCT # | M-MS | 428 | JUN 27 | 30 | OCT 17 | --- | --- | --- | --- | --- |
| 1975 | MAY-OCT # | M-MS | 1 010 | JUL 05 | 49 | SEP 30 | --- | --- | --- | --- | --- |
| 1976 | MAY-OCT # | M-MS | 826 | AUG 30 | 42 | MAY 27 | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 626 | MAY 20 | 40 | OCT 04 | --- | --- | --- | --- | --- |
| 1978 | JUN-OCT # | M-MS | 588 | SEP 12 | 77 | AUG 21 | --- | --- | --- | --- | --- |
| 1979 | JUN-OCT # | M-MS | 394 | JUL 11 | 41 | OCT 03 | --- | --- | --- | --- | --- |
| 1980 | JUN-OCT # | M-MS | 2 880 | JUN 12 * | 69 | OCT 07 | --- | --- | --- | --- | --- |
| 1981 | JUN-OCT # | M-MS | 189 | JUL 30 | 12 | OCT 02 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE  * - EXTREME FOR PERIOD OF RECORD

BIRCH RIVER BELOW ALICE CREEK - STATION NO. 07KE001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING [m] | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 25 | 12:15 | 11.0 | 34.5 | 180 | 22.0 | | | | | | | | | | | | 414 | | | | DH48 |
| OCT 03 | 12:05 | 6.0 | 33.9 | 57 | WELB | | | | | | | | | | | | 284 | | | | DH48 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

BIRCH RIVER BELOW ALICE CREEK - STATION NO. 07KE001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1970 | MAY-JUN # | M-MS | 136 | MAY 14 | 26 | JUN 22 | --- | --- | --- | --- | --- |
| 1971 | MAY-SEP # | M-MS | 45 | SEP 14 | 22 | AUG 02 | --- | --- | --- | --- | --- |
| 1972 | MAY-AUG # | M-MS | 131 | MAY 25 | 8 | AUG 28 | --- | --- | --- | --- | --- |
| 1973 | MAY-OCT # | M-MS | 1 430 | JUL 12 | 37 | OCT 18 | --- | --- | --- | --- | --- |
| 1974 | JUN-OCT # | M-MS | 244 | AUG 20 | 46 | OCT 04 | --- | --- | --- | --- | --- |
| 1975 | MAY-SEP # | M-MS | 6 320 | AUG 25 * | 88 | JUL 21 | --- | --- | --- | --- | --- |
| 1976 | APR-NOV # | M-MS | 637 | APR 19 | 14 | NOV 03 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 386 | APR 17 | 14 | SEP 20 | --- | --- | --- | --- | --- |
| 1978 | APR-SEP # | M-MS | 1 300 | APR 28 | 20 | JUL 26 | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 835 | MAY 19 | 20 | JUL 27 | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 255 | APR 23 | 12 | MAY 23 | --- | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 61 | MAY 26 | 5 | AUG 27 * | --- | --- | --- | --- | --- |
| 1982 | MAY-SEP # | M-MS | 423 | MAY 24 | 16 | JUN 24 | --- | --- | --- | --- | --- |
| 1983 | APR-SEP # | M-MS | 498 | APR 30 | 31 | SEP 15 | --- | --- | --- | --- | --- |
| 1984 | MAY-OCT | M-MS | 180 | MAY 25 | 57 | OCT 03 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE  * - EXTREME FOR PERIOD OF RECORD

BOW RIVER AT CALGARY - STATION NO. 05BH004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 01 | 08:30 | 4.0 | 83.6 | 3 | WELB | | | | | | | | | | | | 188 | | | | DIP |
| JUL 03 | 10:00 | 16.0 | 231 | 11 | MID | | | | | | | | | | | | 138 | | | | DH59 |
| JUL 31 | 08:00 | 17.0 | 117 | 10 | WELB | | | | | | | | | | | | 137 | | | | DIP |
| SEP 04 | 08:40 | 12.0 | 84.0 | 3 | WELB | | | | | | | | | | | | 142 | | | | DIP |
| SEP 27 | 08:50 | 8.0 | 72.0 | 3 | WELB | | | | | | | | | | | | 158 | | | | DIP |

NOTE : SINGLE VERTICAL IS UNDETERMINED

BOW RIVER AT CALGARY - STATION NO. 05BH004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : JAN-DEC MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | APR-DEC | M-S | 101 | JUN 02 | 1 | NOV 24 | 3 470 | JUN 03 | 57 200 | | --- | --- | --- |
| 1973 | JAN-DEC | M-C | 82 | MAY 28 | 1 | AUG 01 | 1 470 | MAY 27 | 30 800 | | 84.4 | 84.4 | --- |
| 1974 | JAN-DEC | M-C | 105 | JUN 28 * | 0 | FEB 04 * | 4 320 | JUN 28 * | 83 300 | * | 174 | 129 | 34.7 |
| 1975 | JAN-DEC | M-C | 29 | JUN 09 | 1 | JAN 03 | 331 | JUN 09 | 11 300 | | 31.0 | 88.5 | 43.2 |
| 1976 | JAN-DEC | M-C | 36 | OCT 15 | 0 | SEP 03 | 688 | AUG 07 | 21 300 | | 58.3 | 86.9 | 35.7 |
| 1977 | JAN-DEC | M-C | 18 | JUN 10 | 2 | MAR 14 | 341 | JUN 10 | 12 600 | | 34.6 | 76.4 | 34.3 |
| 1978 | JAN-DEC | M-C | 57 | JUN 07 | 2 | AUG 09 | 1 090 | JUN 10 | 30 200 | | 82.7 | 77.5 | 27.8 |
| 1979 | JAN-MAY # | M-MS | 20 | APR 11 | 2 | JAN 26 | | --- | --- | | --- | --- | --- |
| 1981 | MAY-OCT # | M-S | 82 | MAY 28 | 2 | OCT 31 | 3 240 | MAY 28 | 5 920 | | --- | --- | --- |
| 1982 | APR-NOV # | M-MS | 17 | APR 26 | 1 | SEP 02 | | --- | --- | | --- | --- | --- |
| 1983 | MAY-SEP # | M-MS | 11 | JUN 01 | 2 | JUL 22 | | --- | --- | | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 11 | JUL 03 | 3 | MAY 01 | | --- | --- | | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

BOW RIVER BELOW BASSANO DAM - STATION NO. 05BH004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAY-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | JUN-OCT | B-S | 345 | JUN 13 | 4 | AUG 08 | 18 800 | JUN 03 | 308 000 | | --- | --- | --- |
| 1973 | APR-OCT | B-S | 157 | MAY 28 | 3 | MAY 13 | 4 720 | MAY 28 | 90 800 | | 491 | 491 | --- |
| 1974 | APR-NOV | B-S | 1 070 | APR 29 * | 2 | AUG 28 * | 32 600 | JUN 18 * | 542 000 | * | 2 710 | 1 800 | 88.3 |
| 1975 | MAY-NOV # | M-MS | 102 | MAY 09 | 6 | JUL 28 | | --- | --- | | --- | --- | --- |
| 1976 | APR-OCT # | M-MS | 134 | AUG 10 | 5 | JUN 07 | | --- | --- | | --- | --- | --- |
| 1977 | APR-NOV # | M-MS | 18 | AUG 22 | 3 | JUL 12 | | --- | --- | | --- | --- | --- |
| 1978 | MAY-OCT # | M-MS | 174 | JUN 13 | 6 | AUG 08 | | --- | --- | | --- | --- | --- |
| 1979 | APR-OCT # | M-MS | 73 | APR 30 | 2 | AUG 30 | | --- | --- | | --- | --- | --- |

B - BOTH AUTOMATIC AND MANUAL SAMPLING M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

BOYER RIVER NEAR FORT VERMILION - STATION NO. 07JF002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 02 | 15:40 | 10.0 | 0.025 | 73 | MID | | | | | | | | | | | | 1020 | | | | DIP |
| MAY 25 | 08:30 | 10.5 | 0.148 | 14 | MID | | | | | | | | | | | | 1100 | | | | DIP |
| JUN 21 | 16:05 | | 0.007 E | 18 | MID | | | | | | | | | | | | 1080 | | | | DIP |
| JUL 04 | 19:20 | 18.0 | 0.328 | 10 | MID | | | | | | | | | | | | 991 | | | | DIP |
| AUG 01 | 14:00 | 22.0 | 0.048 | 12 | MID | | | | | | | | | | | | 830 | | | | DIP |
| AUG 29 | 18:10 | 11.0 | 0.002 E | 9 C | MID | | | | | | | | | | | | 524 | | | | DIP |
| SEP 25 | 12:55 | 7.0 | 0.001 E | 11 | MID | | | | | | | | | | | | 520 | | | | DIP |
| OCT 30 | 15:10 | 0.0 | 1.49 B | 42 | MID | | | | | | | | | | | | 709 | | | | DH48 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): B - ICE CONDITIONS E - ESTIMATED
CONCENTRATION SYMBOL(S): C - ORGANIC MATERIAL PRESENT

BOYER RIVER NEAR FORT VERMILION - STATION NO. 07JF002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | SEP-OCT # | M-MS | 10 | OCT 31 | 9 | SEP 17 | --- | --- | --- | --- | --- |
| 1975 | APR-OCT # | M-MS | 182 | MAY 01 * | 5 | AUG 07 | --- | --- | --- | --- | --- |
| 1976 | APR-SEP # | M-MS | 138 | APR 21 | 8 | JUN 23 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 49 | APR 28 | 4 | SEP 08 * | --- | --- | --- | --- | --- |
| 1978 | MAY-OCT # | M-MS | 45 | MAY 09 | 15 | OCT 04 | --- | --- | --- | --- | --- |
| 1979 | JUL-NOV # | M-MS | 31 | JUL 26 | 4 | AUG 16 | --- | --- | --- | --- | --- |
| 1980 | JUN-JUN | M-MS | 15 | JUN 05 | 15 | JUN 05 | --- | --- | --- | --- | --- |
| 1981 | MAY-JUN # | M-MS | 13 | MAY 27 | 12 | JUN 30 | --- | --- | --- | --- | --- |
| 1982 | MAY-MAY # | M-MS | 85 | MAY 04 | 23 | MAY 20 | --- | --- | --- | --- | --- |
| 1983 | MAY-JUN # | M-MS | 36 | MAY 05 | 11 | JUN 02 | --- | --- | --- | --- | --- |
| 1984 | MAY-OCT | M-MS | 73 | MAY 02 | 9 | AUG 29 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

BRIDLEBIT CREEK NEAR VALLEYVIEW - STATION NO. 07GF005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | MAY-DEC | M-S | 80 | MAY 12 | 3 | MAY 18 | 4.03 | MAY 11 | 11.2 | --- | --- | --- |
| 1968 | JAN-DEC | M-C | 18 | APR 24 | 3 | MAY 18 | 17.3 | JUN 14 * | 37.5 | 0.18 | 0.18 | --- |
| 1969 | MAR-DEC | M-S | 13 | JUL 03 | 0 | SEP 10 * | 3.06 | APR 29 | 11.6 | 0.05 | 0.11 | 50.2 |
| 1970 | MAR-NOV | M-S | 11 | JUL 08 | 1 | MAY 18 | 0.79 | APR 23 | 5.57 | 0.03 | 0.08 | 50.5 |
| 1971 | MAR-OCT | M-S | 41 | APR 19 | 1 | JUN 30 | 2.17 | JUL 12 | 12.5 | 0.08 | 0.08 | 38.4 |
| 1972 | MAR-OCT | M-S | 16 | AUG 04 | 2 | MAY 04 | 11.6 | JUN 26 | 44.8 * | 0.19 | 0.10 | 32.2 |
| 1973 | JAN-NOV | M-S | 15 | APR 09 | 0 | JUN 21 | 5.08 | APR 24 | 25.6 | 0.11 | 0.10 | 28.3 |
| 1974 | MAR-OCT | M-S | 47 | APR 23 | 0 | AUG 08 | 11.0 | APR 23 | 28.9 | 0.12 | 0.10 | 22.6 |
| 1975 | MAY-JUL # | M-MS | 10 | JUN 18 | 8 | JUL 09 | --- | | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 85 | APR 27 | 4 | OCT 03 | --- | | --- | --- | --- | --- |
| 1979 | MAY-AUG # | M-MS | 40 | MAY 18 | 9 | JUL 05 | --- | | --- | --- | --- | --- |
| 1980 | OCT-NOV # | M-MS | 51 | OCT 08 | 7 | NOV 12 | --- | | --- | --- | --- | --- |
| 1981 | MAR-JUL # | M-MS | 107 | JUL 23 * | 8 | APR 03 | --- | | --- | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

## CABIN CREEK NEAR SEEBE - STATION NO. 05BF019

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | SAMPLED CONCENTRATION MINIMUM (mg/L) | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|
| 1969 | JAN-DEC | M-C | 43 JUN 29 | 0 JUN 12 * | 1.15 JUN 29 | 8.32 | 0.03 | 0.03 | --- |
| 1970 | JAN-DEC | M-C | 51 JUN 17 | 0 JUN 10 | 1.82 JUN 15 | 7.44 | 0.03 | 0.03 | 0.0 |
| 1971 | JAN-DEC | B-C | 222 JUN 05 * | 0 JUL 07 | 9.19 JUN 06 * | 24.6 * | 0.10 | 0.05 | 46.9 |
| 1972 | JAN-DEC | B-C | 31 JUN 01 | 0 JUN 21 | 0.65 JUN 01 | 3.99 | 0.02 | 0.05 | 37.4 |
| 1973 | JAN-DEC | B-C | 20 JUN 05 | 0 FEB 20 | 0.28 JUN 05 | 0.88 | 0 01 | 0.04 | 38.9 |
| 1974 | JAN-DEC | B-C | 86 JUN 12 | 0 AUG 15 | 2.21 JUN 15 | 13.6 | 0 05 | 0.04 | 33.8 |
| 1975 | JAN-DEC | B-C | 22 MAY 22 | 0 JAN 05 | 0.07 MAY 22 | 0.10 | 0 | 0.04 | 32.5 |
| 1976 | JAN-DEC | B-C | 15 MAY 13 | 0 AUG 20 | 0.17 MAY 15 | 2.84 | 0.01 | 0.03 | 38.8 |
| 1977 | JAN-DEC | B-C | 10 MAY 10 | 0 JUN 10 | 0.13 MAY 24 | 0.18 | 0 | 0.03 | 36.2 |
| 1978 | JAN-DEC | B-C | 24 JUN 09 | 0 AUG 12 | 0.38 JUN 04 | 4.44 | 0.02 | 0.03 | 32.8 |
| 1979 | JAN-NOV # | B-S | 53 AUG 15 | 0 JUN 13 | 0.32 MAY 28 | 1.80 | --- | --- | --- |
| 1980 | MAR-OCT | M-S | 24 JUL 08 | 0 MAY 08 | 0.27 JUN 10 | 3.89 | 0.02 | 0.03 | 29.6 |
| 1981 | MAY-OCT | M-S | 30 JUN 01 | 2 JUN 09 | 0.48 JUN 02 | 7.55 | --- | --- | --- |
| 1982 | JUN-SEP | M-S | 48 SEP 11 | 1 JUN 23 | 0.45 JUN 10 | 5.88 | --- | --- | --- |
| 1983 | MAY-SEP | M-S | 36 MAY 13 | 1 JUN 01 | 0.13 JUL 03 | 1.79 | --- | --- | --- |

B - BOTH AUTOMATIC AND MANUAL SAMPLING M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## CACHE PERCOTTE CREEK NEAR HINTON - STATION NO. 07AD003

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | SAMPLED CONCENTRATION MINIMUM (mg/L) | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|
| 1986 | JUN-SEP | M-S | 14 JUL 29 | 1 JUL 12 | 0.58 AUG 05 | 4.02 | --- | --- | --- |
| 1987 | MAY-SEP | M-S | 8 MAY 27 | 0 JUL 05 * | 1.62 JUN 18 | 7.40 | --- | --- | --- |
| 1988 | MAY-OCT | M-S | 12 MAY 14 | 1 JUN 04 | 0.07 MAY 09 | --- | --- | --- | --- |
| 1989 | MAY-SEP # | M-S | 115 AUG 05 | 0 MAY 23 | 30.3 AUG 05 * | 31.8 * | --- | --- | --- |
| 1970 | MAR-OCT | M-S | 23 AUG 13 | 1 JUL 31 | 0.25 JUL 29 | 1.78 | 0.01 | 0.01 | --- |
| 1971 | MAY-OCT | M-S | 71 JUN 09 | 0 JUL 20 | 4.52 JUL 11 | 17.4 | --- | --- | --- |
| 1972 | MAR-OCT | M-S | 52 MAY 25 | 0 JUN 19 | 3.22 JUN 25 | 5.65 | 0.03 | 0.02 | 50.0 |
| 1973 | MAY-OCT | M-S | 8 JUN 25 | 0 AUG 20 | 0.34 MAY 27 | 1.97 | --- | --- | --- |
| 1974 | JUL-AUG # | M-MS | 13 AUG 08 | 2 JUL 31 | --- | --- | --- | --- | --- |
| 1975 | MAY-OCT | M-S | 36 AUG 15 | 1 JUN 09 | 0.88 JUN 25 | 1.82 | --- | --- | --- |
| 1976 | APR-OCT | M-S | 129 AUG 18 | 0 JUN 18 | 3.00 AUG 15 | 3.19 | --- | --- | --- |
| 1977 | APR-OCT | M-S | 203 AUG 12 * | 1 JUN 22 | 3.35 MAY 11 | 26.8 | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## CASTLE RIVER AT RANGER STATION - STATION NO. 05AA028

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | SAMPLED CONCENTRATION MINIMUM (mg/L) | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-JUN # | M-MS | 843 JUN 01 * | 19 MAY 04 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

CASTLE RIVER NEAR BEAVER MINES - STATION NO. 05AA022

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-JUN # | M-MS | 383 JUN 01 * | | 10 MAR 24 * | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

CATARACT CREEK NEAR FORESTRY ROAD - STATION NO. 05BL022

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-JUN # | M-MS | 288 MAY 31 * | | 50 MAY 17 | | --- | --- | --- | --- | --- |
| 1976 | MAY-AUG # | M-MS | 28 MAY 13 | | 1 AUG 04 * | | --- | --- | --- | --- | --- |
| 1977 | MAY-MAY # | M-MS | 20 MAY 24 | | 4 MAY 16 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

CHENAL DES QUATRE FOURCHES BELOW FOUR FORKS - STATION NO. 07KF005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | JUN-OCT # | M-MS | 2 680 JUL 21 * | | 14 JUN 11 | | --- | --- | --- | --- | --- |
| 1972 | JUN-AUG # | M-MS | 820 JUL 20 | | 9 AUG 21 * | | --- | --- | --- | --- | --- |
| 1973 | JUN-OCT # | M-MS | 188 JUL 10 | | 15 JUL 24 | | --- | --- | --- | --- | --- |
| 1974 | JUN-NOV # | M-MS | 240 NOV 01 | | 47 JUL 08 | | --- | --- | --- | --- | --- |
| 1975 | MAY-OCT # | M-MS | 869 SEP 08 | | 180 SEP 22 | | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 1 300 JUN 15 | | 34 AUG 22 | | --- | --- | --- | --- | --- |
| 1978 | JUN-OCT # | M-MS | 1 190 JUL 11 | | 38 AUG 21 | | --- | --- | --- | --- | --- |
| 1979 | JUN-SEP # | M-MS | 172 JUL 05 | | 15 AUG 16 | | --- | --- | --- | --- | --- |
| 1980 | JUN-OCT # | M-MS | 607 JUN 18 | | 34 SEP 18 | | --- | --- | --- | --- | --- |
| 1981 | JUN-OCT # | M-MS | 118 JUL 10 | | 21 AUG 05 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

CLEARWATER RIVER AT DRAPER - STATION NO. 07CD001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 21 | 14:15 | 8.0 | 155 | 110 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 08 | 16:30 | 12.0 | 100 | 21 | MID | | | | | | | | | | | | 184 | | | | DH59 |
| MAY 16 | 19:30 | 7.0 | 103 | 25 | MID | | | | | | | | | | | | 182 | | | | DH59 |
| MAY 18 | 15:20 | 8.0 | 116 | 42 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 24 | 15:00 | 12.0 | 252 | 218 | MID | | | | | | | | | | | | 140 | | | | DH59 |
| MAY 28 | 15:00 | 13.0 | 229 | 157 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 29 | 11:30 | 11.0 | 220 | 158 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 01 | 15:30 | 11.0 | 218 | 147 | MID | | | | | | | | | | | | 152 | | | | D49 |
| JUL 15 | 17:07 | 18.0 | 188 | 125 | MID | | | | | | | | | | | | 149 | | | | D49 |
| JUL 20 | 08:40 | 18.0 | 181 | 91 | MID | | | | | | | | | | | | 153 | | | | D49 |
| JUL 22 | 17:43 | 20.0 | 148 | 98 | MID | | | | | | | | | | | | 155 | | | | D49 |
| AUG 10 | 16:37 | 23.0 | 113 | 82 | MID | | | | | | | | | | | | 172 | | | | D49 |
| AUG 14 | 13:31 | 19.0 | 113 | 80 | MID | | | | | | | | | | | | 172 | | | | D49 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

CLEARWATER RIVER AT DRAPER - STATION NO. 07CD001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | MAY-DEC # | M-MS | 330 | MAY 12 | 5 | DEC 12 | --- | | --- | | --- | --- | --- |
| 1968 | JAN-DEC # | M-MS | 369 | JUL 04 | 3 | MAR 21 * | --- | | --- | | --- | --- | --- |
| 1969 | JAN-DEC | M-C | 2 030 | APR 21 | 3 | AUG 25 | 78 500 | APR 21 | 810 000 | | 2 470 | 2 470 | --- |
| 1970 | JAN-DEC | M-C | 2 380 | JUL 02 * | 5 | JAN 28 | 137 000 | JUL 02 * | 1 630 000 | * | 5 580 | 4 530 | 45.4 |
| 1971 | JAN-DEC | M-C | 1 880 | APR 24 | 5 | JAN 29 | 68 000 | APR 24 | 887 000 | | 2 780 | 3 940 | 33.5 |
| 1972 | JAN-DEC | M-C | 841 | MAY 04 | 5 | AUG 21 | 47 200 | MAY 04 | 485 000 | | 1 950 | 3 450 | 30.7 |
| 1973 | JAN-SEP | M-S | 1 710 | AUG 07 | 5 | FEB 28 | 80 400 | AUG 07 | 930 000 | | --- | --- | --- |
| 1974 | MAY-OCT | M-S | 788 | MAY 11 | 80 | SEP 11 | 76 500 | MAY 01 | 1 240 000 | | --- | --- | --- |
| 1975 | JAN-OCT # | M-S | 1 030 | JUL 17 | 7 | MAR 18 | 35 500 | JUL 18 | 1 020 000 | | --- | --- | --- |
| 1976 | JAN-OCT # | M-S | 1 280 | AUG 28 | 10 | MAR 03 | 35 200 | AUG 28 | 717 000 | | 2 920 | 3 340 | 24.7 |
| 1977 | APR-OCT | M-S | 852 | MAY 20 | 15 | OCT 26 | 17 600 | MAY 31 | 485 000 | | --- | --- | --- |
| 1978 | JAN-DEC | M-C | 884 | APR 30 | 5 | DEC 04 | 17 700 | APR 30 | 527 000 | | 2 120 | 3 140 | 22.4 |
| 1979 | JAN-OCT | M-S | 1 000 | MAY 17 | 7 | JAN 08 | 46 800 | MAY 17 | 873 000 | | 3 550 | 3 200 | 18.7 |
| 1980 | APR-OCT | M-S | 1 050 | AUG 05 | 11 | JUL 29 | 25 300 | AUG 18 | 553 000 | | --- | --- | --- |
| 1981 | MAY-SEP # | M-S | 118 | AUG 08 | 7 | SEP 01 | 1 320 | JUL 17 | 34 500 | | --- | --- | --- |
| 1982 | JUN-SEP | M-S | 47 | AUG 15 | 5 | JUL 20 | 711 | JUN 01 | 30 900 | | --- | --- | --- |
| 1983 | APR-SEP # | M-S | 133 | APR 29 | 18 | JUN 22 | 2 010 | APR 29 | 82 500 | | --- | --- | --- |
| 1984 | APR-AUG | M-MS | 218 | MAY 24 | 21 | MAY 08 | | --- | --- | | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION

S - SEASONAL OPERATION

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

CLEARWATER RIVER NEAR ROCKY MOUNTAIN HOUSE - STATION NO. 05DB001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | APR-JUN # | M-MS | 320 | JUN 17 * | 5 | APR 26 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

CONNOR CREEK NEAR ROCHFORT BRIDGE - STATION NO. 07BB010

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM | | MINIMUM | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY | TOTAL FOR PERIOD | SUMMARY : MEAN LOAD | HISTORICAL MEAN LOAD | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/L) | | (mg/L) | | (TONNES) | (TONNES) | (TONNES) | (TONNES) | |
| 1975 | MAY-MAY | M-MS | 27 | MAY 08 * | 27 | MAY 08 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

CONNOR CREEK NEAR SANGUDO - STATION NO. 07BB009

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM | | MINIMUM | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY | TOTAL FOR PERIOD | SUMMARY : MEAN LOAD | HISTORICAL MEAN LOAD | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/L) | | (mg/L) | | (TONNES) | (TONNES) | (TONNES) | (TONNES) | |
| 1975 | APR-APR # | M-MS | 44 | APR 23 * | 18 | APR 21 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

CROWFOOT CREEK NEAR CLUNY - STATION NO. 05BM008

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM | | MINIMUM | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY | TOTAL FOR PERIOD | SUMMARY : MAR-OCT MEAN LOAD | HISTORICAL MEAN LOAD | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/L) | | (mg/L) | | (TONNES) | (TONNES) | (TONNES) | (TONNES) | |
| 1977 | MAY-MAY | M-MS | 9 | MAY 17 * | 9 | MAY 17 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

CROWSNEST RIVER AT FRANK - STATION NO. 05AA008

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 04 | 11:47 | 3.0 | 1.18 | 35 | MID | | | | | | | | | | | | 271 | | | | DH48 |
| MAY 02 | 11:55 | 5.0 | 2.41 | 6 | MID | | | | | | | | | | | | 257 | | | | DH48 |
| MAY 24 | 13:40 | 4.0 | 7.12 | 11 | MID | | | | | | | | | | | | 193 | | | | DH48 |
| JUN 12 | 08:20 | 8.0 | 10.2 | 15 | MID | | | | | | | | | | | | 180 | | | | DH48 |
| JUL 11 | 09:05 | 12.0 | 5.66 | 9 | MID | | | | | | | | | | | | 198 | | | | DH48 |
| AUG 21 | 14:30 | 13.0 | 2.24 | 6 | MID | | | | | | | | | | | | 219 | | | | DH48 |
| SEP 18 | 10:35 | 10.0 | 1.62 | 8 | MID | | | | | | | | | | | | 249 | | | | DH48 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

ALBERTA

CROWSNEST RIVER AT FRANK - STATION NO. 05AA008

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-JUN # | M-MS | 602 MAY 31 * | | 42 JUN 09 | | --- | | --- | --- | --- | --- |
| 1974 | JUL-OCT # | M-MS | 8 JUL 23 | | 3 OCT 02 | | --- | | --- | --- | --- | --- |
| 1975 | MAY-NOV # | M-MS | 584 JUN 20 | | 2 SEP 02 | | --- | | --- | --- | --- | --- |
| 1976 | APR-NOV | M-S | 107 AUG 09 | | 2 OCT 05 | | 271 | AUG 08 | 3 760 | --- | --- | --- |
| 1977 | MAR-DEC | M-S | 24 JUN 09 | | 4 APR 13 | | 13.7 | JUN 08 | 713 | 2.75 | 2.75 | --- |
| 1978 | JAN-DEC | M-C | 74 JUN 05 | | 2 OCT 31 | | 157 | JUN 05 | 2 610 | 10.4 | 9.58 | 58.1 |
| 1979 | JAN-OCT | M-S | 183 MAY 25 | | 0 FEB 13 * | | 525 | MAY 27 * | 3 830 * | 15.5 | 9.55 | 38.6 |
| 1980 | MAR-OCT | M-S | 88 APR 30 | | 4 AUG 17 | | 181 | APR 30 | 2 080 | 8.50 | 9.29 | 28.3 |
| 1981 | MAY-OCT # | M-MS | 61 MAY 01 | | 5 SEP 03 | | --- | | --- | --- | --- | --- |
| 1982 | APR-SEP # | M-MS | 28 APR 15 | | 2 SEP 16 | | --- | | --- | --- | --- | --- |
| 1983 | MAR-NOV # | M-MS | 88 MAR 30 | | 3 SEP 01 | | --- | | --- | --- | --- | --- |
| 1984 | APR-SEP | M-MS | 35 APR 04 | | 4 AUG 21 | | --- | | --- | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION

S - SEASONAL OPERATION

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

DEER CREEK (MAIN STEM) NEAR SUNDRE - STATION NO. 05CA003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAY-OCT MEAN LOAD (TONNES) | SUMMARY : MAY-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAY-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1988 | MAY-DEC | M-S | 52 JUN 17 * | | 10 SEP 30 * | | 0.28 | JUN 08 | 4.89 | 0.03 | 0.03 | --- |
| 1989 | JAN-OCT | M-S | 52 OCT 30 | | 10 JUN 30 | | 5.55 | JUL 06 * | 51.5 * | 0.33 | 0.18 | 83.1 |

M - MANUAL SAMPLING

S - SEASONAL OPERATION

* - EXTREME FOR PERIOD OF RECORD

## DEERLICK CREEK NEAR HINTON - STATION NO. 07AF004

### SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 53 09 20 N LONG 117 14 36 W
DRAINAGE AREA: 14.0 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 28.15 TONNES FOR THE PERIOD MAR 28 TO OCT 31

REMARKS:

| | MAR | | | APR | | | MAY | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | | | | 0.048 B | 14 | 0.06 | 0.033 | 4 S | 0.01 | 1 |
| 2 | | | | 0.050 B | 16 | 0.06 | 0.063 | 8 S | 0.04 | 2 |
| 3 | | | | 0.054 B | 18 S | 0.09 | 0.103 | 15 S | 0.13 | 3 |
| 4 | | | | 0.049 B | 20 | 0.08 | 0.139 | 9 S | 0.10 | 4 |
| 5 | | | | 0.070 B | 19 | 0.11 | 0.152 | 8 S | 0.08 | 5 |
| 6 | | | | 0.062 B | 16 S | 0.08 | 0.198 | 11 S | 0.19 | 6 |
| 7 | | | | 0.061 B | 13 | 0.06 | 0.222 | 10 S | 0.19 | 7 |
| 8 | | | | 0.060 B | 11 | 0.04 | 0.249 | 8 S | 0.17 | 8 |
| 9 | | | | 0.039 B | 11 | 0.04 | 0.243 | 8 S | 0.17 | 9 |
| 10 | | | | 0.040 B | 11 | 0.04 | 0.169 | 9 S | 0.15 | 10 |
| 11 | | | | 0.041 B | 11 | 0.04 | 0.161 | 3 S | 0.04 | 11 |
| 12 | | | | 0.041 B | 11 S | 0.04 | 0.180 | 5 S | 0.07 | 12 |
| 13 | | | | 0.054 B | 4 S | 0.02 | 0.169 | 12 S | 0.18 | 13 |
| 14 | | | | 0.116 B | 5 | 0.05 | 0.181 | 4 S | 0.06 | 14 |
| 15 | 0.026 B | | | 0.265 B | 8 | 0.18 | 0.214 | 3 S | 0.05 | 15 |
| 16 | | | | 0.367 B | 12 | 0.38 | 0.512 | 51 S | 2.25 | 16 |
| 17 | | | | 0.186 B | 9 S | 0.14 | 0.449 | 20 S | 0.76 | 17 |
| 18 | | | | 0.187 B | 9 S | 0.15 | 0.320 | 8 S | 0.22 | 18 |
| 19 | | | | 0.151 B | 7 S | 0.09 | 0.278 | 4 S | 0.10 | 19 |
| 20 | | | | 0.153 B | 8 | 0.08 | 0.255 | 4 S | 0.09 | 20 |
| 21 | | | | 0.155 B | 5 | 0.06 | 0.221 | 2 S | 0.04 | 21 |
| 22 | | | | 0.089 B | 6 | 0.05 | 0.195 | 1 S | 0.02 | 22 |
| 23 | | | | 0.059 B | 5 | 0.03 | 0.186 | 0 S | 0 | 23 |
| 24 | | | | 0.038 B | 5 | 0.02 | 0.170 | 1 S | 0.01 | 24 |
| 25 | | | | 0.032 B | 4 | 0.01 | 0.147 | 0 S | 0 | 25 |
| 26 | | | | 0.031 B | 4 S | 0.01 | 0.138 | 0 S | 0 | 26 |
| 27 | | | | 0.026 B | 3 | 0.01 | 0.140 | 0 S | 0 | 27 |
| 28 | 0.028 B | 4 S | 0.01 | 0.022 B | 4 S | 0.01 | 0.133 | 0 S | 0 | 28 |
| 29 | 0.028 B | 4 | 0.01 | 0.021 | 4 S | 0.01 | 0.132 | 1 S | 0.01 | 29 |
| 30 | 0.032 B | 5 | 0.01 | 0.026 | 4 | 0.01 | 0.134 | 2 S | 0.02 | 30 |
| 31 | 0.042 B | 11 | 0.04 | | | | 0.148 | 2 S | 0.03 | 31 |
| TOTAL | 0 | | 0.07 | 2.529 | | 2.05 | 5.024 | | 5.22 | TOTAL |

| | JUN | | | JUL | | | AUG | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 0.147 | 1 S | 0.01 | 0.125 | 0 S | 0 | 0.027 | 2 S | 0 | 1 |
| 2 | 0.131 | 2 S | 0.02 | 0.114 | 0 S | 0 | 0.029 | 3 | 0.01 | 2 |
| 3 | 0.127 | 1 S | 0.01 | 0.103 | 1 S | 0.01 | 0.031 | 4 S | 0.01 | 3 |
| 4 | 0.132 | 2 S | 0.02 | 0.097 | 3 S | 0.03 | 0.036 | 4 | 0.01 | 4 |
| 5 | 0.182 | 4 S | 0.06 | 0.091 | 1 S | 0.01 | 0.027 | 4 | 0.01 | 5 |
| 6 | 0.325 | 5 S | 0.14 | 0.084 | 1 S | 0.01 | 0.047 | 3 S | 0.01 | 6 |
| 7 | 0.435 | 2 S | 0.08 | 0.080 | 0 S | 0 | 0.036 | 1 | 0 | 7 |
| 8 | 1.10 | 81 S | 7.70 | 0.080 | 0 S | 0 | 0.030 | 0 S | 0 | 8 |
| 9 | 0.810 | 54 S | 4.25 | 0.078 | 1 S | 0.01 | 0.026 | 0 | 0 | 9 |
| 10 | 0.826 | 23 S | 1.35 | 0.072 | 0 S | 0 | 0.027 | 2 S | 0 | 10 |
| 11 | 0.845 | 7 S | 0.33 | 0.068 | 2 S | 0.01 | 0.029 | 3 | 0.01 | 11 |
| 12 | 0.485 | 8 S | 0.34 | 0.072 | 2 S | 0.01 | 0.027 | 2 | 0 | 12 |
| 13 | 0.418 | 2 S | 0.07 | 0.081 | 1 S | 0.01 | 0.026 | 2 S | 0 | 13 |
| 14 | 0.394 | 4 S | 0.13 | 0.071 | 1 S | 0.01 | 0.031 | 2 | 0.01 | 14 |
| 15 | 0.398 | 4 S | 0.13 | 0.069 | 1 S | 0.01 | 0.027 | 2 | 0 | 15 |
| 16 | 0.351 | 3 S | 0.08 | 0.051 | 0 S | 0 | 0.023 | 1 | 0 | 16 |
| 17 | 0.327 | 3 S | 0.08 | 0.047 | 1 S | 0 | 0.023 | 1 | 0 | 17 |
| 18 | 0.308 | 2 S | 0.05 | 0.044 | 0 S | 0 | 0.022 | 1 S | 0 | 18 |
| 19 | 0.293 | 1 S | 0.03 | 0.043 | 0 S | 0 | 0.021 | 2 S | 0 | 19 |
| 20 | 0.286 | 0 S | 0 | 0.048 | 0 S | 0 | 0.020 | 1 | 0 | 20 |
| 21 | 0.247 | 1 S | 0.02 | 0.048 | 1 S | 0 | 0.019 | 1 S | 0 | 21 |
| 22 | 0.318 | 1 S | 0.03 | 0.050 | 0 S | 0 | 0.018 | 2 | 0 | 22 |
| 23 | 0.267 | 7 S | 0.18 | 0.043 | 0 S | 0 | 0.018 | 2 S | 0 | 23 |
| 24 | 0.227 | 7 S | 0.14 | 0.037 | 4 S | 0.01 | 0.020 | 1 S | 0 | 24 |
| 25 | 0.206 | 1 S | 0.02 | 0.033 | 1 S | 0 | 0.019 | 1 | 0 | 25 |
| 26 | 0.188 | 1 S | 0.02 | 0.031 | 1 S | 0 | 0.017 | 2 | 0 | 26 |
| 27 | 0.171 | 0 S | 0 | 0.030 | 1 | 0 | 0.021 | 2 S | 0 | 27 |
| 28 | 0.155 | 1 S | 0.01 | 0.029 | 1 S | 0 | 0.027 | 3 | 0.01 | 28 |
| 29 | 0.155 | 3 S | 0.04 | 0.027 | 1 | 0 | 0.030 | 3 S | 0.01 | 29 |
| 30 | 0.144 | 1 S | 0.01 | 0.027 | 1 S | 0 | 0.019 | 2 | 0 | 30 |
| 31 | | | | 0.025 | 2 | 0 | 0.018 | 0 S | 0 | 31 |
| TOTAL | 9.898 | | 15.23 | 1.894 | | 0.13 | 0.782 | | 0.09 | TOTAL |

B - ICE CONDITIONS S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

DEERLICK CREEK NEAR HINTON - STATION NO. 07AF004

SUSPENDED SEDIMENT FOR 1984

| DAY | SEP DAILY DISCHARGE ($m^3/s$) | SEP MEAN CONCENTRATION (mg/L) | SEP DAILY LOAD (t) | OCT DAILY DISCHARGE ($m^3/s$) | OCT MEAN CONCENTRATION (mg/L) | OCT DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.021 | 0 | 0 | 0.208 | 1 S | 0.02 | | | | 1 |
| 2 | 0.018 | 0 | 0 | 0.305 | 4 S | 0.11 | | | | 2 |
| 3 | 0.018 | 1 | 0 | 0.487 | 11 | 0.48 | | | | 3 |
| 4 | 0.018 | 1 | 0 | 0.585 | 11 | 0.85 | | | | 4 |
| 5 | 0.018 | 1 S | 0 | 0.614 | 3 | 0.18 | | | | 5 |
| 6 | 0.255 | 35 S | 0.77 | 0.503 | 3 | 0.13 | | | | 6 |
| 7 | 0.317 | 7 S | 0.19 | 0.479 | 3 | 0.12 | | | | 7 |
| 8 | 0.182 | 5 S | 0.07 | 0.427 | 3 | 0.11 | | | | 8 |
| 9 | 0.218 | 11 S | 0.21 | 0.331 | 3 | 0.08 | | | | 9 |
| 10 | 0.262 | 12 | 0.27 | 0.277 | 3 | 0.07 | | | | 10 |
| 11 | 0.234 | 12 | 0.24 | 0.245 | 3 | 0.08 | | | | 11 |
| 12 | 0.208 | 12 | 0.21 | 0.229 | 3 | 0.08 | | | | 12 |
| 13 | 0.195 | 11 | 0.19 | 0.205 | 3 | 0.05 | | | | 13 |
| 14 | 0.164 | 11 | 0.15 | 0.181 | 3 | 0.05 | | | | 14 |
| 15 | 0.138 | 9 S | 0.11 | 0.165 | 3 | 0.04 | | | | 15 |
| 16 | 0.118 | 5 | 0.05 | 0.152 | 3 S | 0.04 | | | | 16 |
| 17 | 0.107 | 1 S | 0.01 | 0.149 B | 3 | 0.04 | | | | 17 |
| 18 | 0.136 | 0 S | 0 | 0.140 B | 3 | 0.04 | | | | 18 |
| 19 | 0.137 | 0 | 0 | 0.155 B | 3 | 0.04 | | | | 19 |
| 20 | 0.135 | 0 | 0 | 0.133 B | 3 | 0.03 | | | | 20 |
| 21 | 0.177 | 1 | 0.02 | 0.109 B | 2 | 0.02 | | | | 21 |
| 22 | 0.185 | 1 | 0.01 | 0.114 B | 3 | 0.03 | | | | 22 |
| 23 | 0.152 | 1 | 0.01 | 0.105 B | 3 | 0.03 | | | | 23 |
| 24 | 0.145 | 1 | 0.01 | 0.081 B | 3 | 0.02 | | | | 24 |
| 25 | 0.138 | 1 S | 0.01 | 0.072 B | 3 | 0.02 | | | | 25 |
| 26 | 0.136 | 3 | 0.04 | 0.082 B | 3 | 0.02 | | | | 26 |
| 27 | 0.170 | 9 S | 0.13 | 0.057 B | 3 | 0.01 | | | | 27 |
| 28 | 0.181 | 8 | 0.11 | 0.084 B | 3 | 0.02 | | | | 28 |
| 29 | 0.117 | 0 S | 0 | 0.086 B | 3 | 0.02 | | | | 29 |
| 30 | 0.152 | 0 S | 0 | 0.086 B | 4 | 0.02 | | | | 30 |
| 31 | | | | 0.073 B | 4 S | 0.03 | | | | 31 |
| TOTAL | 4.388 | | 2.82 | 8.843 | | 2.61 | | | | TOTAL |

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

DEERLICK CREEK NEAR HINTON - STATION NO. 07AF004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (&) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 28 | 11:40 | 0.0 | 0.026 W | 4 | MID | | | | | | | | | | | | 170 | | | | DIP |
| APR 03 | 14:30 | 0.0 | 0.054 W | 20 | MID | | | | | | | | | | | | 115 | | | | DIP |
| APR 06 | 14:30 | 0.0 | 0.042 W | 14 | MID | | | | | | | | | | | | 107 | | | | DIP |
| APR 12 | 12:40 | | 0.041 W | 11 | MID | | | | | | | | | | | | | | | | DIP |
| APR 13 | 09:20 | | 0.054 W | 2 | MID | | | | | | | | | | | | | | | | DIP |
| APR 17 | 10:20 | | 0.188 B | 8 | MID | | | | | | | | | | | | | | | | DIP |
| APR 18 | 11:00 | | 0.183 B | 10 | MID | | | | | | | | | | | | | | | | DIP |
| APR 19 | 10:10 | | 0.154 B | 7 | MID | | | | | | | | | | | | | | | | DIP |
| APR 26 | 12:20 | 0.0 | 0.036 B | 4 | MID | | | | | | | | | | | | | | | | DIP |
| APR 28 | 11:40 | 0.0 | 0.051 B | 4 | MID | | | | | | | | | | | | | | | | DIP |
| APR 29 | 13:20 | 0.5 | 0.056 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 01 | 17:30 | 1.5 | 0.036 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 02 | 15:00 | 1.4 | 0.056 | 9 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 03 | 21:00 | .4 | 0.117 | 17 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 04 | 14:20 | | 0.120 | 8 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 05 | 13:10 | | 0.126 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 06 | 10:00 | .9 | 0.170 | 12 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 07 | 14:00 | | 0.201 | 10 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 08 | 13:40 | 2.4 | 0.236 | 7 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 09 | 14:30 | | 0.226 | 8 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 10 | 12:20 | | 0.184 | 10 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 11 | 15:50 | | 0.156 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 12 | 14:40 | | 0.154 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 13 | 14:00 | | 0.184 | 15 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 14 | 10:00 | 2.3 | 0.170 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 15 | 17:50 | | 0.225 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 09:20 | | 0.381 | 37 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 12:30 | | 0.541 | 66 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 17:20 | | 0.724 | 87 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 21:50 | | 0.678 | 65 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 17 | 10:10 | | 0.427 | 15 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 18 | 10:10 | | 0.312 | 8 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 19 | 13:30 | | 0.273 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 20 | 16:50 | 5.8 | 0.248 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 21 | 14:00 | 2.7 | 0.218 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 22 | 14:00 | 5.7 | 0.193 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 23 | 14:10 | | 0.189 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 24 | 11:10 | 3.5 | 0.167 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 25 | 11:30 | | 0.142 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 26 | 14:50 | 5.1 | 0.137 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 27 | 15:00 | 7.2 | 0.138 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 28 | 11:00 | 4.5 | 0.131 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 29 | 11:20 | 5.0 | 0.130 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 30 | 12:00 | | 0.135 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 31 | 11:10 | | 0.146 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 01 | 12:20 | 5.0 | 0.148 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 02 | 10:50 | 4.7 | 0.130 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 03 | 10:50 | 0.5 | 0.127 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 04 | 11:20 | 5.0 | 0.127 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 05 | 14:20 | | 0.180 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 06 | 15:30 | 7.0 | 0.350 | 8 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 07 | 05:50 | | 0.399 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 07 | 09:20 | | 0.380 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 07 | 23:20 | | 0.853 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 05:40 | 4.1 | 1.04 | 100 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 08:20 | 4.1 | 1.06 | 87 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 21:30 | 4.1 | 1.24 | 120 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 09 | 15:00 | 5.0 | 0.880 | 34 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 10 | 12:40 | | 0.601 | 24 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 11 | 11:50 | | 0.553 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 12 | 16:00 | 7.0 | 0.495 | 9 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 13 | 10:20 | 4.5 | 0.416 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 14 | 14:50 | 10.5 | 0.348 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 15 | 10:00 | 5.9 | 0.387 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 16 | 15:00 | 5.0 | 0.366 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 17 | 11:30 | 5.0 | 0.327 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 18 | 12:00 | 4.0 | 0.312 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 19 | 11:40 | 5.5 | 0.291 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 20 | 14:10 | 9.7 | 0.271 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 21 | 12:00 | | 0.245 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 22 | 11:10 | 6.2 | 0.326 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 23 | 10:50 | 7.9 | 0.259 | 8 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 24 | 11:20 | 8.6 | 0.231 | 8 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 25 | 09:20 | 5.6 | 0.207 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 26 | 09:50 | 7.0 | 0.190 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 27 | 10:00 | 7.8 | 0.174 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 28 | 08:30 | | 0.157 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 29 | 11:40 | 8.2 | 0.150 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 30 | 12:10 | 7.8 | 0.143 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 01 | 11:50 | | 0.128 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 02 | 10:20 | 7.3 | 0.115 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 03 | 10:30 | 8.5 | 0.105 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 04 | 11:30 | 8.2 | 0.098 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 05 | 08:30 | 7.5 | 0.093 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 06 | 09:50 | 7.7 | 0.085 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 08 | 15:00 | 13.0 | 0.086 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 09 | 13:00 | 9.7 | 0.078 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 10 | 14:20 | 10.4 | 0.073 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 11 | 15:10 | | 0.086 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 12 | 13:20 | 11.4 | 0.086 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 13 | 15:30 | 12.0 | 0.091 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 14 | 10:40 | 10.0 | 0.071 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 15 | 10:30 | 10.0 | 0.060 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 16 | 09:20 | 8.8 | 0.052 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 17 | 10:40 | 10.5 | 0.048 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 18 | 11:40 | 14.8 | 0.045 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 19 | 11:20 | 13.0 | 0.044 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 20 | 15:20 | 13.7 | 0.047 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 21 | 09:20 | | 0.047 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 22 | 10:20 | 7.7 | 0.051 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 23 | 13:50 | 14.0 | 0.042 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 24 | 14:20 | 17.4 | 0.037 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 25 | 11:50 | 12.8 | 0.034 | 0 | MID | | | | | | | | | | | | | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): B - ICE CONDITIONS W - DAILY MEAN; ICE CONDITIONS

CONTINUED

DEERLICK CREEK NEAR HINTON - STATION NO. 07AF004 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JUL 28 | 11:50 | | 0.031 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 28 | 10:40 | | 0.030 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 30 | 10:50 | | 0.027 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 01 | 16:20 | | 0.024 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 03 | 09:30 | 13.2 | 0.027 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 06 | 12:20 | | 0.050 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 08 | 12:30 | | 0.031 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 10 | 14:50 | 17.0 | 0.027 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 13 | 10:10 | 12.0 | 0.025 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 18 | 12:00 | | 0.022 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 19 | 09:00 | 8.5 | 0.021 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 21 | 14:20 | 14.0 | 0.019 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 23 | 09:30 | | 0.018 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 24 | 13:50 | 12.0 | 0.021 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 27 | 09:00 | | 0.013 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 29 | 12:00 | | 0.020 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 31 | 09:50 | | 0.019 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 05 | 15:00 | | 0.018 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 06:20 | | 0.030 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 09:30 | | 0.056 | 7 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 13:40 | | 0.268 | 60 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 18:40 | | 0.288 | 114 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 22:00 | | 0.585 | 43 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 07 | 10:30 | | 0.303 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 08 | 10:40 | | 0.159 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 09 | 10:50 | | 0.177 | 14 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 09 | 15:30 | | 0.265 | 8 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 09 | 18:20 | | 0.293 | 16 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 09 | 24:00 | | 0.326 | 17 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 15 | 12:10 | | 0.135 | 10 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 17 | 16:10 | 9.0 | 0.108 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 18 | 16:50 | | 0.147 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 25 | 13:40 | | 0.145 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 27 | 08:50 | | 0.307 | 12 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 29 | 16:50 | | 0.114 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 30 | 13:50 | 3.0 | 0.141 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 01 | 15:10 | | 0.185 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 02 | 15:40 | 5.0 | 0.312 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 02 | 23:10 | | 0.418 | 10 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 16 | 14:50 | 1.5 | 0.151 | 3 | MID | | | | | | | | | | | | 112 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DEERLICK CREEK NEAR HINTON - STATION NO. 07AF004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | TOTAL FOR PERIOD (TONNES) | SUMMARY : APR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | JUN-OCT | M-S | 13 | JUN 16 | 0 | JUN 05 * | 13.3 | JUN 09 | 30.8 | --- | --- | --- |
| 1968 | MAY-OCT | M-S | 20 | JUL 24 | 3 | JUN 28 | 6.88 | JUL 32 | 38.4 | --- | --- | --- |
| 1969 | MAY-OCT | M-S | 757 | AUG 05 | 2 | AUG 27 | 126 | JUL 05 | 245 | --- | --- | --- |
| 1970 | MAY-OCT | M-S | 34 | JUN 17 | 0 | AUG 18 | 8.85 | JUN 18 | 31.4 | --- | --- | --- |
| 1971 | APR-OCT | M-S | 138 | JUN 08 | 1 | SEP 18 | 36.2 | JUN 09 | 111 | 0.52 | 0.52 | --- |
| 1972 | MAY-OCT | M-S | 224 | JUN 25 | 1 | AUG 23 | 36.6 | JUN 25 | 114 | --- | --- | --- |
| 1973 | APR-NOV | M-S | 205 | MAY 18 | 1 | AUG 02 | 18.2 | MAY 18 | 89.8 | 0.47 | 0.50 | 5.1 |
| 1974 | APR-OCT | M-S | 133 | MAY 08 | 1 | AUG 13 | 12.4 | MAY 08 | 77.6 | 0.37 | 0.45 | 9.8 |
| 1975 | APR-OCT | M-S | 375 | MAY 08 | 1 | SEP 10 | 8.15 | MAY 09 | 74.2 | 0.35 | 0.43 | 9.4 |
| 1976 | APR-OCT | M-S | 820 | JUN 16 | 2 | JUL 27 | 45.0 | JUN 16 | 170 | 0.80 | 0.50 | 16.2 |
| 1977 | MAR-OCT | M-S | 262 | JUL 05 | 3 | JUN 26 | 15.8 | JUL 08 | 214 | 1.00 | 0.59 | 16.0 |
| 1978 | APR-OCT | M-S | 294 | APR 28 | 2 | OCT 11 | 35.1 | MAY 16 | 246 | 1.15 | 0.67 | 16.0 |
| 1979 | MAY-SEP | M-S | 658 | MAY 17 | 0 | JUL 30 | 29.0 | MAY 17 | 91.5 | --- | --- | --- |
| 1980 | APR-SEP | M-S | 142 | MAY 26 | 1 | JUL 24 | 281 | JUN 04 | 559 * | --- | --- | --- |
| 1981 | MAY-SEP | M-S | 180 | MAY 16 | 1 | JUN 28 | 10.2 | MAY 15 | 70.8 | --- | --- | --- |
| 1982 | APR-NOV | M-S | 1 090 | JUL 04 * | 1 | AUG 13 | 295 | JUL 04 * | 531 | 2.48 | 0.89 | 28.1 |
| 1983 | APR-NOV | M-S | 148 | JUN 24 | 0 | AUG 05 | 9.86 | JUN 24 | 36.8 | 0.17 | 0.81 | 26.9 |
| 1984 | MAR-OCT | M-S | 120 | JUN 08 | 0 | MAY 23 | 7.70 | JUN 08 | 37.2 | 0.13 | 0.74 | 29.8 |

M - MANUAL SAMPLING

S - SEASONAL OPERATION

* - EXTREME FOR PERIOD OF RECORD

DOVER RIVER NEAR THE MOUTH - STATION NO. 07DB002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | SAMPLED CONCENTRATION MINIMUM (mg/L) | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|
| 1977 | JUN-OCT # | M-MS | 8 JUN 27 * | 8 AUG 22 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

DRIFTPILE RIVER NEAR DRIFTPILE - STATION NO. 07BH003

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 55 20 48 N LONG 115 47 39 W
DRAINAGE AREA: 837 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 144 310.47 TONNES FOR THE PERIOD APR 01 TO SEP 30

REMARKS:

| | APR | | | MAY | | | JUN | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 1.18 B | 138 | 14.1 | 2.32 | 88 | 17.6 | 13.2 | 1 300 | 1 480 | 1 |
| 2 | 1.22 B | 124 | 13.1 | 2.25 | 76 | 14.8 | 24.7 | 2 380 | 5 080 | 2 |
| 3 | 1.26 B | 142 | 15.5 | 2.27 | 66 | 12.9 | 14.9 | 787 S | 1 010 | 3 |
| 4 | 1.29 B | 120 | 13.4 | 2.46 | 63 | 13.4 | 10.4 | 509 | 457 | 4 |
| 5 | 1.41 B | 128 S | 15.6 | 2.77 | 76 | 18.2 | 7.99 | 345 | 238 | 5 |
| 6 | 1.55 B | 183 | 24.5 | 2.86 | 75 | 18.5 | 11.3 | 532 S | 519 | 6 |
| 7 | 1.79 B | 263 | 40.7 | 2.79 | 71 | 17.1 | 87.1 | 3 700 S | 27 600 | 7 |
| 8 | 1.41 B | 211 S | 25.7 | 2.45 | 68 | 14.4 | 87.8 | 3 000 S | 22 800 | 8 |
| 9 | 1.55 B | 263 | 35.2 | 2.27 | 63 | 12.4 | 49.0 | 1 470 S | 6 220 | 9 |
| 10 | 1.79 B | 313 | 48.4 | 2.42 | 73 | 15.3 | 28.8 | 937 S | 2 330 | 10 |
| 11 | 2.78 | 277 | 86.1 | 2.69 | 89 | 22.2 | 19.7 | 838 S | 1 080 | 11 |
| 12 | 2.42 | 226 S | 47.3 | 2.79 | 67 | 16.2 | 14.3 | 501 | 619 | 12 |
| 13 | 2.44 | 235 | 49.5 | 2.78 | 71 | 17.1 | 11.0 | 340 | 323 | 13 |
| 14 | 2.62 | 211 | 47.8 | 2.73 | 61 | 14.4 | 8.98 | 180 S | 140 | 14 |
| 15 | 3.27 | 136 | 38.4 | 2.85 | 68 | 16.8 | 7.48 | 155 | 100 | 15 |
| 16 | 8.84 | 1 040 S | 824 | 4.19 | 498 | 180 | 6.20 | 187 S | 100 | 16 |
| 17 | 8.32 | 2 010 | 1 440 | 44.8 | 3 830 | 14 800 | 6.74 | 272 | 158 | 17 |
| 18 | 6.43 | 339 S | 188 | 40.5 | 2 720 S | 9 520 | 6.51 | 218 S | 123 | 18 |
| 19 | 5.78 | 270 | 135 | 25.2 | 1 140 | 2 480 | 5.25 | 203 S | 92.3 | 19 |
| 20 | 4.91 | 227 S | 96.3 | 21.5 | 863 S | 1 230 | 4.73 | 195 | 80.1 | 20 |
| 21 | 5.12 | 309 | 137 | 25.1 | 588 | 1 270 | 4.21 | 139 | 50.6 | 21 |
| 22 | 5.80 | 281 | 148 | 41.4 | 2 530 | 9 050 | 3.73 | 98 S | 31.6 | 22 |
| 23 | 5.48 | 284 | 135 | 38.7 | 1 520 S | 4 820 | 3.39 | 92 | 26.8 | 23 |
| 24 | 4.74 | 207 S | 84.8 | 34.5 | 1 800 | 5 370 | 3.15 | 110 | 29.9 | 24 |
| 25 | 4.13 | 157 | 56.0 | 27.7 | 1 010 S | 2 420 | 2.89 | 91 S | 22.7 | 25 |
| 26 | 3.68 | 188 | 60.1 | 21.9 | 378 | 715 | 2.67 | 72 | 16.0 | 26 |
| 27 | 3.14 | 118 S | 32.0 | 17.0 | 378 S | 557 | 2.32 | 74 | 14.8 | 27 |
| 28 | 2.77 | 88 | 18.8 | 13.1 | 347 | 393 | 2.08 | 88 S | 11.9 | 28 |
| 29 | 2.68 | 80 | 18.5 | 10.3 | 316 | 281 | 2.15 | 95 | 17.7 | 29 |
| 30 | 2.43 | 81 S | 13.8 | 8.88 | 285 S | 214 | 5.45 | 525 S | 293 | 30 |
| 31 | | | | 7.88 | 248 | 184 | | | | 31 |
| TOTAL | 100.42 | | 3 888.8 | 419.24 | | 53 805.3 | 459.05 | | 71 274.5 | TOTAL |

| | JUL | | | AUG | | | SEP | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 28.5 | 1 400 S | 3 480 | 0.931 | 18 | 1.45 | 1.37 | 10 S | 1.18 | 1 |
| 2 | 16.2 | 3 020 S | 4 230 | 0.859 | 17 | 1.26 | 1.30 | 8 | 0.90 | 2 |
| 3 | 10.6 | 670 S | 614 | 0.814 | 15 S | 1.13 | 1.84 | 16 | 2.84 | 3 |
| 4 | 7.63 | 183 | 107 | 0.815 | 15 | 1.13 | 2.10 | 15 | 3.80 | 4 |
| 5 | 6.05 | 274 S | 143 | 0.798 | 13 | 0.89 | 1.84 | 14 S | 2.23 | 5 |
| 6 | 5.80 | 228 S | 115 | 1.07 | 14 S | 1.29 | 1.63 | 20 S | 3.18 | 6 |
| 7 | 6.77 | 216 S | 126 | 1.08 | 11 S | 1.04 | 13.3 | 787 S | 881 | 7 |
| 8 | 16.8 | 884 S | 993 | 1.88 | 18 | 2.61 | 28.0 | 1 550 S | 3 880 | 8 |
| 9 | 17.5 | 483 S | 730 | 1.48 | 18 | 2.26 | 16.2 | 713 S | 998 | 9 |
| 10 | 11.9 | 398 S | 407 | 1.18 | 16 | 1.63 | 10.7 | 381 S | 352 | 10 |
| 11 | 8.04 | 336 | 233 | 1.10 | 14 | 1.33 | 8.07 | 252 S | 176 | 11 |
| 12 | 6.00 | 190 S | 88.5 | 1.00 | 10 S | 0.86 | 8.92 | 248 S | 149 | 12 |
| 13 | 6.73 | 243 | 141 | 1.08 | 12 | 1.10 | 6.88 | 338 S | 193 | 13 |
| 14 | 8.26 | 284 | 138 | 5.32 | 146 | 57.1 | 8.40 | 280 | 121 | 14 |
| 15 | 4.71 | 182 | 74.1 | 5.62 | 182 | 88.4 | 4.47 | 209 S | 80.7 | 15 |
| 16 | 3.72 | 111 S | 35.7 | 4.68 | 133 | 53.5 | 3.76 | 170 | 55.2 | 16 |
| 17 | 3.12 | 73 | 19.7 | 3.77 | 86 | 31.3 | 3.21 | 124 | 34.4 | 17 |
| 18 | 2.84 | 70 | 18.0 | 2.72 | 58 | 13.6 | 2.80 | 96 | 24.1 | 18 |
| 19 | 2.30 | 88 S | 11.1 | 2.09 | 43 S | 7.76 | 2.71 | 92 | 21.5 | 19 |
| 20 | 2.08 | 80 | 8.88 | 2.07 | 44 | 7.87 | 2.39 | 89 | 12.2 | 20 |
| 21 | 1.95 | 51 | 8.58 | 2.83 | 104 | 28.4 | 2.10 | 47 S | 8.83 | 21 |
| 22 | 2.08 | 82 | 14.7 | 3.88 | 143 S | 47.8 | 2.01 | 47 | 8.18 | 22 |
| 23 | 3.18 | 143 | 39.0 | 3.14 | 83 | 22.5 | 2.01 | 37 | 6.43 | 23 |
| 24 | 2.51 | 41 S | 8.88 | 2.58 | 48 | 10.2 | 1.91 | 31 | 5.12 | 24 |
| 25 | 1.88 | 18 | 3.25 | 2.00 | 28 S | 4.84 | 1.80 | 28 | 4.35 | 25 |
| 26 | 1.83 | 20 | 2.82 | 1.81 | 18 | 2.80 | 1.77 | 33 | 5.05 | 26 |
| 27 | 1.40 | 21 | 2.64 | 1.38 | 14 S | 1.87 | 1.82 | 33 | 5.32 | 27 |
| 28 | 1.25 | 22 S | 2.38 | 1.25 | 13 | 1.40 | 1.51 | 24 S | 3.13 | 28 |
| 29 | 1.18 | 23 | 2.34 | 1.33 | 16 S | 1.72 | 1.51 | 25 | 3.28 | 29 |
| 30 | 1.08 | 21 | 1.88 | 1.83 | 18 | 2.83 | 1.53 | 24 | 3.17 | 30 |
| 31 | 1.01 | 19 | 1.85 | 1.61 | 14 | 1.83 | | | | 31 |
| TOTAL | 182.81 | | 11 779.24 | 83.218 | | 410.00 | 143.87 | | 7 041.43 | TOTAL |

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

DRIFTPILE RIVER NEAR DRIFTPILE - STATION NO. 07BH003

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | | INSTANT. CONCENT. (mg/L) | | SINGLE VERTICAL SAMPLING (m) | | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 05 | 16:20 | 0.0 | 1.35 | B | 103 | | MID | X | | | | | | | | | | | | 132 | | | | DH48 |
| APR 08 | 15:30 | | 1.38 | B | 227 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| APR 12 | 18:05 | | 2.17 | | 259 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| APR 16 | 14:50 | 5.0 | 7.99 | | 86 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| APR 16 | 18:40 | 5.0 | 8.58 | | 3190 | C | 30.0 | | 34 | 48 | 63 | 79 | 88 | 92 | 98 | 99 | 100 | | | 224 | 8 | 44 | 48 | DH59 |
| APR 18 | 17:40 | 7.0 | 5.90 | | 257 | C | 30.0 | | | | | | | | | | | | | 130 | | | | DH59 |
| APR 20 | 20:00 | 9.0 | 4.54 | | 259 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| APR 24 | 17:35 | 9.0 | 4.70 | | 180 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| APR 27 | 18:30 | 8.5 | 2.92 | | 72 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| APR 30 | 17:15 | 8.0 | 2.37 | | 50 | | 30.0 | | | | | | | | | | | | | 138 | | | | DH59 |
| MAY 18 | 14:10 | 7.0 | 38.4 | | 2370 | | 30.0 | | 25 | 34 | 48 | 60 | 78 | 89 | 93 | 99 | 100 | | | 205 | 11 | 55 | 34 | DH59 |
| MAY 20 | 15:45 | 9.0 | 20.9 | | 635 | C | 30.0 | | | | | | | | | | | | | 128 | | | | DH59 |
| MAY 23 | 15:55 | 7.0 | 34.4 | | 1160 | C | 30.0 | | | | | | | | | | | | | 133 | | | | DH59 |
| MAY 25 | 15:55 | | 27.1 | | 810 | C | 30.0 | | | | | | | | | | | | | 128 | | | | DH59 |
| MAY 25 | 17:00 | 8.0 | 28.5 | | 536 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| MAY 27 | 17:00 | 10.0 | 16.1 | | 372 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| MAY 30 | 18:55 | 14.0 | 8.34 | | 264 | C | 30.0 | | | | | | | | | | | | | 136 | | | | DH59 |
| JUN 3 | 18:40 | 14.0 | 13.0 | | 807 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUN 6 | 16:30 | 12.0 | 11.1 | | 385 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUN 7 | 14:15 | 8.0 | 82.1 | | 3800 | | 30.0 | | 17 | 21 | 33 | 42 | 60 | 78 | 92 | 98 | 100 | | | 181 | 22 | 57 | 21 | DH59 |
| JUN 7 | 17:15 | 9.0 | 84.5 | | 3320 | | 30.0 | | | | | | | | | | | | | 181 | | | | DH59 |
| JUN 8 | 17:30 | 10.0 | 82.5 | | 2440 | | 30.0 | | | | | | | | | | | | | 142 | | | | DH59 |
| JUN 9 | 05:30 | 9.0 | 56.2 | | 1750 | | 30.0 | | | | | | | | | | | | | 127 | | | | DH59 |
| JUN 9 | 17:30 | 12.0 | 41.1 | | 1240 | | 30.0 | | | | | | | | | | | | | 127 | | | | DH59 |
| JUN 10 | 05:30 | 10.0 | 31.8 | | 1100 | C | 30.0 | | | | | | | | | | | | | 130 | | | | DH59 |
| JUN 10 | 17:00 | 14.0 | 26.4 | | 810 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUN 11 | 17:00 | 17.0 | 18.1 | | 605 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUN 14 | 17:00 | 19.0 | 8.95 | | 180 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUN 15 | 17:20 | 15.0 | 6.07 | | 213 | C | 30.0 | | | | | | | | | | | | | 152 | | | | DH59 |
| JUN 16 | 17:00 | 15.0 | 6.15 | | 156 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUN 19 | 16:45 | 15.0 | 5.11 | | 238 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUN 22 | 17:00 | 20.0 | 3.67 | | 89 | | 30.0 | | | | | | | | | | | | | 148 | | | | DH59 |
| JUN 25 | 14:45 | | 2.85 | | 82 | | MID | X | | | | | | | | | | | | 166 | | | | DH48 |
| JUN 25 | 16:40 | 21.0 | 2.86 | | 77 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUN 28 | 16:40 | 22.0 | 2.06 | | 74 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUN 30 | 16:30 | 15.0 | 4.84 | | 213 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 1 | 05:10 | 12.0 | 36.1 | | 1810 | | 30.0 | | 15 | 23 | 35 | 43 | 59 | 69 | 77 | 95 | 100 | | | 151 | 31 | 46 | 23 | DH59 |
| JUL 1 | 16:40 | 13.0 | 28.0 | | 1520 | | 30.0 | | | | | | | | | | | | | 137 | | | | DH59 |
| JUL 2 | 05:20 | 11.0 | 18.6 | | 734 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 2 | 16:50 | 14.0 | 14.4 | | 5150 | C | 30.0 | | | | | | | | | | | | | 131 | | | | DH59 |
| JUL 3 | 16:30 | 17.0 | 9.86 | | 236 | C | 30.0 | | | | | | | | | | | | | 122 | | | | DH59 |
| JUL 5 | 17:10 | 15.0 | 5.02 | | 418 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 6 | 17:00 | 15.0 | 5.84 | | 139 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 7 | 17:00 | 14.0 | 7.03 | | 231 | C | 30.0 | | | | | | | | | | | | | 145 | | | | DH59 |
| JUL 8 | 16:50 | 14.0 | 20.3 | | 845 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 9 | 05:00 | 12.0 | 18.5 | | 545 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 9 | 16:00 | 15.0 | 16.5 | | 432 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 10 | 16:50 | 18.0 | 10.7 | | 395 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 12 | 16:50 | 18.0 | 5.71 | | 137 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 15 | 17:30 | 24.0 | 3.55 | | 90 | | 30.0 | | | | | | | | | | | | | 135 | | | | DH59 |
| JUL 19 | 16:30 | 22.0 | 2.25 | | 58 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 24 | 12:20 | 21.0 | 2.49 | | 32 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| JUL 24 | 16:30 | 24.0 | 2.46 | | 25 | | 30.0 | | | | | | | | | | | | | 181 | | | | DH59 |
| JUL 26 | 16:30 | 19.0 | 1.22 | | 22 | | 30.0 | | | | | | | | | | | | | 178 | | | | DH59 |
| AUG 3 | 13:15 | 23.0 | 0.808 | | 15 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| AUG 6 | 17:00 | 21.0 | 1.05 | | 11 | | 30.0 | | | | | | | | | | | | | 189 | | | | DH59 |
| AUG 7 | 19:10 | 21.5 | 1.05 | | 10 | | 30.0 | | | | | | | | | | | | | 200 | | | | DH59 |
| AUG 12 | 13:40 | 23.0 | 0.886 | | 9 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| AUG 19 | 17:00 | 16.0 | 2.02 | | 41 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| AUG 22 | 17:05 | 20.0 | 3.59 | | 129 | | 30.0 | | | | | | | | | | | | | 147 | | | | DH59 |
| AUG 25 | 16:40 | 18.0 | 1.90 | | 25 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| AUG 27 | 14:50 | 15.0 | 1.38 | | 14 | | 30.0 | | | | | | | | | | | | | 151 | | | | DH59 |
| AUG 29 | 16:35 | 12.0 | 1.42 | | 16 | | 30.0 | | | | | | | | | | | | | 154 | | | | DH59 |
| SEP 1 | 17:00 | 13.0 | 1.38 | | 8 | | 30.0 | | | | | | | | | | | | | 177 | | | | DH59 |
| SEP 5 | 18:00 | 15.0 | 1.77 | | 18 | | 30.0 | | | | | | | | | | | | | 155 | | | | DH59 |
| SEP 6 | 17:45 | 12.0 | 1.85 | | 29 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| SEP 7 | 15:20 | 10.0 | 13.7 | | 1380 | | 30.0 | | 2 | 5 | 8 | 12 | 22 | 39 | 61 | 93 | 100 | | | 146 | 61 | 34 | 5 | DH59 |
| SEP 8 | 08:30 | 7.0 | 24.4 | | 1540 | | 30.0 | | 18 | 28 | 41 | 53 | 66 | 74 | 79 | 95 | 100 | | | 147 | 28 | 46 | 28 | DH59 |
| SEP 8 | 16:30 | 9.0 | 25.1 | | 1820 | | 30.0 | | 11 | 14 | 22 | 29 | 34 | 37 | 42 | 76 | 96 | 100 | | 137 | 63 | 23 | 14 | DH59 |
| SEP 9 | 08:30 | 7.0 | 18.4 | | 835 | | 30.0 | | 10 | 15 | 23 | 29 | 33 | 36 | 41 | 82 | 99 | 100 | | 126 | 64 | 21 | 15 | DH59 |
| SEP 9 | 16:30 | 9.0 | 14.6 | | 566 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| SEP 10 | 16:30 | 10.0 | 9.92 | | 356 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| SEP 11 | 16:30 | 9.0 | 7.69 | | 239 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| SEP 12 | 16:30 | 9.0 | 6.82 | | 247 | | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| SEP 13 | 16:30 | 10.0 | 5.38 | | 331 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| SEP 15 | 16:30 | 10.0 | 4.30 | | 202 | C | 30.0 | | | | | | | | | | | | | | | | | DH59 |
| SEP 21 | 16:30 | 9.0 | 2.10 | | 48 | | 30.0 | | | | | | | | | | | | | 133 | | | | DH59 |
| SEP 28 | 13:20 | 8.0 | 1.81 | | 28 | | 30.0 | | | | | | | | | | | | | 171 | | | | DH59 |
| | | | | | | | | | | | | | | | | | | | | 180 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT 30 METRES

DISCHARGE SYMBOL(S): B - ICE CONDITIONS
CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

ALBERTA

DRIFTPILE RIVER NEAR DRIFTPILE - STATION NO. 07BH003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAY-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1977 | APR-OCT # | M-MS | 883 | APR 15 | 13 | AUG 24 | --- | | --- | --- | --- | --- |
| 1978 | MAY-NOV | M-S | 5 780 | JUN 14 * | 11 | OCT 15 | 108 000 | JUN 14 * | 425 000 * | 2 310 | 2 310 | --- |
| 1980 | FEB-OCT # | M-S | 3 340 | MAY 28 | 11 | OCT 24 | 8 080 | MAY 28 | 35 300 | 185 | 1 240 | 85.5 |
| 1981 | APR-OCT | M-S | 1 370 | JUL 24 | 5 | SEP 04 | 6 960 | JUL 23 | 28 600 | 150 | 875 | 82.0 |
| 1982 | MAY-OCT # | M-S | 2 010 | AUG 04 | 2 | OCT 13 * | 18 300 | AUG 04 | 48 400 | --- | --- | --- |
| 1983 | APR-OCT | M-S | 4 350 | JUN 28 | 5 | JUN 03 | 88 500 | JUN 28 | 370 000 | 2 010 | 1 160 | 80.1 |
| 1984 | APR-SEP | M-S | 5 150 | JUL 2 | 9 | AUG 12 | 27 800 | JUN 07 | 148 000 | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

DUNKIRK RIVER NEAR FORT MACKAY - STATION NO. 07DB003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1977 | JUN-OCT # | M-MS | 10 | JUL 26 | 3 | SEP 21 * | --- | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 42 | MAY 02 * | 5 | AUG 22 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

DUTCH CREEK NEAR THE MOUTH - STATION NO. 05AA028

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-JUN # | M-MS | 675 | MAY 31 * | 10 | MAY 04 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

EAST PRAIRIE RIVER NEAR ENILDA - STATION NO. 07BF001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 09 | 15:10 | 1.0 | 4.70 | 288 | 38.0 | | | | | | | | | | | | 174 | | | | DH59 |
| APR 26 | 09:20 | 4.0 | 5.01 | 285 | 37.0 | | | | | | | | | | | | 161 | | | | DH59 |
| MAY 10 | 15:00 | 5.0 | 48.8 | 2890 | 32.0 | 11 | 17 | 25 | 32 | 45 | 57 | 73 | 88 | 100 | | | 173 | 43 | 40 | 17 | DH59 |
| MAY 22 | 10:30 | | 28.7 | 2070 | 33.5 | | | | | | | | | | | | 170 | | | | DH59 |
| JUN 08 | 14:00 | 13.0 | 103 | 5040 | 38.0 | 10 | 23 | 37 | 48 | 68 | 78 | 90 | 98 | 100 | | | 188 | 21 | 56 | 23 | DH59 |
| JUN 11 | 13:25 | | 35.7 | 1320 C | 33.0 | | | | | | | | | | | | 163 | | | | DH59 |
| JUN 25 | 11:00 | 10.0 | 4.90 | 152 C | 36.0 | | | | | | | | | | | | 182 | | | | DH48 |
| JUL 24 | 10:00 | 21.0 | 3.81 | 108 C | 36.0 | | | | | | | | | | | | 207 | | | | DH48 |
| AUG 27 | 10:55 | 14.0 | 3.13 | 82 | 33.5 | | | | | | | | | | | | 187 | | | | DH48 |
| SEP 24 | 15:00 | 7.0 | 3.20 | 33 | MID | | | | | | | | | | | | 183 | | | | DH48 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

EAST PRAIRIE RIVER NEAR ENILDA - STATION NO. 07EF001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | APR-OCT # | M-MS | 3 500 | MAY 08 | 17 | OCT 29 * | --- | --- | --- | --- | --- |
| 1975 | APR-OCT # | M-MS | 5 730 | JUL 18 | 32 | SEP 26 | --- | --- | --- | --- | --- |
| 1976 | APR-OCT # | M-MS | 3 980 | JUN 27 | 46 | OCT 07 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 3 890 | APR 13 | 27 | AUG 25 | --- | --- | --- | --- | --- |
| 1978 | SEP-OCT # | M-MS | 524 | OCT 23 | 373 | SEP 27 | --- | --- | --- | --- | --- |
| 1979 | APR-SEP # | M-MS | 9 260 | JUL 03 | 31 | SEP 19 | --- | --- | --- | --- | --- |
| 1980 | MAY-OCT # | M-MS | 635 | JUN 03 | 38 | JUL 28 | --- | --- | --- | --- | --- |
| 1981 | MAY-OCT # | M-MS | 178 | MAY 27 | 21 | JUL 07 | --- | --- | --- | --- | --- |
| 1982 | APR-OCT # | M-MS | 10 100 | MAY 04 | 28 | OCT 04 | --- | --- | --- | --- | --- |
| 1983 | APR-OCT # | M-MS | 12 300 | JUN 28 * | 55 | OCT 24 | --- | --- | --- | --- | --- |
| 1984 | APR-SEP | M-MS | 5 040 | JUN 09 | 33 | SEP 24 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

EAST STREETER CREEK NEAR NANTON - STATION NO. 05AB024

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : APR-SEP MEAN LOAD (TONNES) | SUMMARY : APR-SEP HISTORICAL MEAN LOAD (TONNES) | SUMMARY : APR-SEP STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1985 | APR-DEC | M-S | 55 | MAY 08 * | 0 | APR 02 * | 0.10 | JUL 01 | 1.10 | 0.01 | 0.01 | --- |
| 1986 | JAN-DEC | M-C | 34 | MAY 11 | 2 | JUN 22 | 0.25 | JUN 07 * | 1.21 * | 0.01 | 0.01 | 0.0 |
| 1987 | JAN-SEP | M-S | 30 | JUN 01 | 22 | MAY 24 | 0 | JAN 01 | --- | 0 | 0.01 | 40.8 |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION

* - EXTREME FOR PERIOD OF RECORD

EAST STREETER CREEK NEAR NANTON - STATION NO. 05AB024

MONTHLY AND ANNUAL TOTAL VOLUMETRIC BED LOAD IN CUBIC METRES

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL | YEAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 1985 |
| 1986 | 0 | 0 | 0 | 0.2 | 0 | 0.8 | 0.8 | 0 | 0 | 0 | 0 | 0 | 1.8 | 1986 |
| 1987 | 0 | 0 | 0 | 0 | 0.5 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 1.2 | 1987 |
| 1988 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1988 |
| MEAN | 0 | 0 | 0 | 0.1 | 0.1 | 0.5 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0.8 | MEAN |

BED LOAD MEASURED BY VOLUMETRIC METHOD. MONTHLY DISTRIBUTION ESTIMATED.

ELBOW RIVER AT BRAGG CREEK - STATION NO. 05BJ004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 03 | 13:25 | 4.0 | 3.34 | 0 | MID | | | | | | | | | | | | 270 | | | | DH48 |
| MAY 28 | 13:20 | 9.0 | 5.27 | 1 | MID | | | | | | | | | | | | 277 | | | | DH48 |
| JUN 11 | 13:57 | 10.0 | 19.4 | 59 | MID | | | | | | | | | | | | 199 | | | | DH48 |
| JUL 23 | 12:05 | 12.0 | 8.77 | 2 | MID | | | | | | | | | | | | 222 | | | | DH48 |
| AUG 27 | 12:00 | 9.0 | 4.86 | 1 | MID | | | | | | | | | | | | 237 | | | | DH48 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

ALBERTA

ELBOW RIVER AT BRAGG CREEK - STATION NO. 05BJ004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1968 | JUN-JUN | M-S | 347 | JUN 08 | 10 | JUN 21 | 1 320 | JUN 08 | 4 890 | --- | --- | --- |
| 1969 | MAY-OCT | M-S | 1 210 | JUN 25 * | 0 | SEP 08 * | 11 700 | JUN 29 * | 60 800 * | --- | --- | --- |
| 1970 | APR-JUN # | M-MS | 1 200 | JUN 18 | 2 | APR 27 | --- | | --- | --- | --- | --- |
| 1971 | MAR-DEC | M-S | 858 | JUN 05 | 0 | MAR 02 | 6 360 | JUN 08 | 17 900 | 72.8 | 72.8 | --- |
| 1972 | JAN-OCT | M-S | 455 | MAY 31 | 0 | JAN 05 | 1 880 | MAY 31 | 13 900 | 55.8 | 84.8 | 12.4 |
| 1973 | MAR-NOV | M-S | 327 | MAY 26 | 0 | MAR 02 | 1 220 | MAY 26 | 7 380 | 30.0 | 53.1 | 23.4 |
| 1974 | MAR-NOV | M-S | 1 020 | JUN 17 | 1 | APR 05 | 5 820 | JUN 17 | 34 300 | 140 | 74.8 | 31.3 |
| 1975 | MAR-OCT | M-S | 371 | JUN 20 | 0 | MAY 13 | 1 580 | JUN 20 | 8 050 | 24.7 | 54.8 | 32.0 |
| 1976 | MAY-SEP # | M-MS | 5 | MAY 03 | 1 | JUN 03 | --- | | --- | --- | --- | --- |
| 1977 | APR-SEP # | M-MS | 7 | APR 05 | 1 | MAY 04 | --- | | --- | --- | --- | --- |
| 1978 | MAY-SEP # | M-MS | 440 | JUN 05 | 1 | AUG 30 | --- | | --- | --- | --- | --- |
| 1979 | APR-SEP # | M-MS | 13 | MAY 29 | 0 | JUL 25 | --- | | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 20 | MAY 30 | 2 | JUL 30 | --- | | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 940 | MAY 26 | 2 | AUG 26 | --- | | --- | --- | --- | --- |
| 1982 | MAY-SEP # | M-MS | 21 | JUN 07 | 1 | SEP 28 | --- | | --- | --- | --- | --- |
| 1983 | APR-AUG # | M-MS | 54 | JUN 24 | 3 | AUG 17 | --- | | --- | --- | --- | --- |
| 1984 | MAY-AUG | M-MS | 59 | JUN 11 | 0 | MAY 03 | --- | | --- | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

ELLS RIVER NEAR THE MOUTH - STATION NO. 07DA017

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 22 | 19:15 | 10.0 | 10.2 | 40 | 10.0 | | | | | | | | | | | | 158 | | | | DH48 |
| AUG 10 | 13:25 | 22.0 | 10.0 | 24 | MID | | | | | | | | | | | | 122 | | | | DH48 |
| AUG 10 | 13:26 | 22.0 | 10.0 | 25 | MID | | | | | | | | | | | | 123 | | | | DH48 |
| SEP 22 | 12:30 | 8.0 | 9.77 | 13 | 17.0 | | | | | | | | | | | | 131 | | | | DH48 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

ELLS RIVER NEAR THE MOUTH - STATION NO. 07DA017

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-NOV # | M-MS | 1 500 | APR 15 * | 5 | AUG 08 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 144 | APR 26 | 4 | JUN 27 | --- | --- | --- | --- | --- |
| 1978 | APR-SEP # | M-MS | 1 480 | APR 27 | 2 | AUG 22 * | --- | --- | --- | --- | --- |
| 1979 | APR-OCT # | M-MS | 717 | APR 30 | 5 | JUL 26 | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 40 | APR 24 | 2 | JUN 24 | --- | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 41 | MAY 28 | 4 | AUG 29 | --- | --- | --- | --- | --- |
| 1982 | JUN-SEP # | M-MS | 9 | JUN 24 | 3 | AUG 03 | --- | --- | --- | --- | --- |
| 1983 | APR-SEP # | M-MS | 350 | APR 28 | 6 | JUN 21 | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 40 | MAY 22 | 13 | SEP 22 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

EMBARRAS RIVER BELOW DIVERGENCE - STATION NO. 07DD003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | MAY-DEC # | M-MS | 1 320 | JUN 15 | 6 | DEC 20 * | --- | --- | --- | --- | --- |
| 1972 | JUL-AUG # | M-MS | 1 010 | JUL 04 | 88 | AUG 22 | --- | --- | --- | --- | --- |
| 1973 | JUN-OCT # | M-MS | 313 | APR 29 | 7 | JUL 05 | --- | --- | --- | --- | --- |
| 1974 | JUN-SEP # | M-MS | 488 | JUN 26 | 52 | SEP 18 | --- | --- | --- | --- | --- |
| 1976 | MAY-SEP # | M-MS | 973 | AUG 30 | 29 | JUN 10 | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 858 | MAY 20 | 85 | SEP 18 | --- | --- | --- | --- | --- |
| 1978 | JUN-OCT # | M-MS | 395 | SEP 18 | 78 | AUG 22 | --- | --- | --- | --- | --- |
| 1979 | JUN-SEP # | M-MS | 435 | JUL 11 | 83 | SEP 04 | --- | --- | --- | --- | --- |
| 1980 | JUN-OCT # | M-MS | 2 130 | JUN 12 * | 80 | SEP 10 | --- | --- | --- | --- | --- |
| 1981 | JUN-AUG # | M-MS | 247 | JUL 31 | 117 | JUL 15 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE  * - EXTREME FOR PERIOD OF RECORD

ALBERTA

EUNICE CREEK NEAR HINTON - STATION NO. 07AF005

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 53 05 10 N LONG 117 13 55 W
DRAINAGE AREA: 17.1 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 19.44 TONNES FOR THE PERIOD APR 01 TO OCT 31

REMARKS:

| | APR | | | MAY | | | JUN | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 0.038 B | 1 | 0 | 0.074 B | 2 S | 0.01 | 0.090 | 1 S | 0.01 | 1 |
| 2 | 0.038 B | 1 | 0 | 0.088 B | 2 S | 0.02 | 0.083 | 2 S | 0.01 | 2 |
| 3 | 0.038 B | 1 S | 0 | 0.109 B | 3 S | 0.03 | 0.082 | 2 S | 0.01 | 3 |
| 4 | 0.038 B | 3 | 0.01 | 0.108 | 5 S | 0.05 | 0.085 | 1 S | 0.01 | 4 |
| 5 | 0.038 B | 5 | 0.02 | 0.092 | 4 S | 0.03 | 0.124 | 4 S | 0.04 | 5 |
| 6 | 0.032 B | 8 S | 0.02 | 0.112 | 9 S | 0.09 | 0.185 | 7 S | 0.11 | 6 |
| 7 | 0.028 B | 7 | 0.02 | 0.125 | 4 S | 0.04 | 0.265 | 4 S | 0.09 | 7 |
| 8 | 0.028 B | 7 | 0.02 | 0.141 | 5 S | 0.06 | 0.738 | 102 S | 8.50 | 8 |
| 9 | 0.028 B | 6 | 0.02 | 0.163 | 5 S | 0.08 | 0.826 | 33 S | 1.76 | 9 |
| 10 | 0.029 B | 8 S | 0.02 | 0.146 | 5 S | 0.06 | 0.672 | 15 S | 0.81 | 10 |
| 11 | 0.029 B | 7 | 0.02 | 0.127 | 5 S | 0.06 | 0.377 | 9 S | 0.28 | 11 |
| 12 | 0.028 B | 7 S | 0.02 | 0.128 | 5 S | 0.05 | 0.341 | 9 S | 0.27 | 12 |
| 13 | 0.028 B | 2 S | 0 | 0.137 | 10 S | 0.12 | 0.315 | 5 S | 0.14 | 13 |
| 14 | 0.026 B | 2 | 0 | 0.145 | 6 S | 0.08 | 0.278 | 6 S | 0.14 | 14 |
| 15 | 0.049 B | 2 | 0.01 | 0.159 | 5 S | 0.07 | 0.288 | 9 S | 0.22 | 15 |
| 16 | 0.109 B | 3 | 0.03 | 0.368 | 77 S | 2.45 | 0.275 | 6 S | 0.14 | 16 |
| 17 | 0.115 B | 5 S | 0.05 | 0.370 | 33 S | 1.05 | 0.230 | 4 S | 0.09 | 17 |
| 18 | 0.136 B | 5 S | 0.08 | 0.241 | 21 S | 0.44 | 0.244 | 5 S | 0.11 | 18 |
| 19 | 0.135 B | 3 S | 0.03 | 0.215 | 8 S | 0.17 | 0.230 | 3 S | 0.08 | 19 |
| 20 | 0.153 B | 3 | 0.04 | 0.194 | 5 S | 0.08 | 0.210 | 2 S | 0.04 | 20 |
| 21 | 0.184 B | 3 | 0.05 | 0.184 | 3 S | 0.04 | 0.189 | 2 S | 0.03 | 21 |
| 22 | 0.166 B | 3 | 0.04 | 0.163 | 2 S | 0.02 | 0.219 | 4 S | 0.08 | 22 |
| 23 | 0.133 B | 4 | 0.05 | 0.135 | 2 S | 0.02 | 0.185 | 7 S | 0.11 | 23 |
| 24 | 0.118 B | 4 | 0.04 | 0.125 | 2 S | 0.02 | 0.188 | 3 S | 0.04 | 24 |
| 25 | 0.110 B | 4 | 0.04 | 0.112 | 3 S | 0.03 | 0.157 | 2 S | 0.03 | 25 |
| 26 | 0.091 B | 4 S | 0.03 | 0.101 | 2 S | 0.02 | 0.148 | 2 S | 0.03 | 26 |
| 27 | 0.108 B | 3 | 0.03 | 0.094 | 2 S | 0.02 | 0.139 | 2 S | 0.02 | 27 |
| 28 | 0.077 B | 1 S | 0.01 | 0.087 | 6 S | 0.05 | 0.131 | 3 S | 0.03 | 28 |
| 29 | 0.072 B | 1 | 0.01 | 0.084 | 2 S | 0.01 | 0.132 | 0 S | 0 | 29 |
| 30 | 0.076 B | 2 | 0.01 | 0.083 | 3 S | 0.02 | 0.127 | 0 S | 0 | 30 |
| 31 | | | | 0.088 | 2 S | 0.02 | | | | 31 |
| TOTAL | 2.275 | | 0.70 | 4.457 | | 5.26 | 7.153 | | 11.04 | TOTAL |

| | JUL | | | AUG | | | SEP | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 0.116 | 0 S | 0 | 0.081 | 1 | 0.01 | 0.037 | 4 | 0.01 | 1 |
| 2 | 0.107 | 0 S | 0 | 0.083 | 1 | 0.01 | 0.034 | 4 | 0.01 | 2 |
| 3 | 0.102 | 1 S | 0.01 | 0.083 | 1 | 0.01 | 0.033 | 4 | 0.01 | 3 |
| 4 | 0.100 | 1 S | 0.01 | 0.081 | 1 | 0.01 | 0.032 | 3 | 0.01 | 4 |
| 5 | 0.097 | 0 S | 0 | 0.087 | 1 | 0 | 0.031 | 4 S | 0.01 | 5 |
| 6 | 0.094 | 0 S | 0 | 0.088 | 1 | 0 | 0.088 | 23 S | 0.19 | 6 |
| 7 | 0.092 | 0 S | 0 | 0.084 | 1 | 0 | 0.117 | 3 S | 0.03 | 7 |
| 8 | 0.087 | 0 S | 0 | 0.084 | 1 | 0 | 0.072 | 2 S | 0.01 | 8 |
| 9 | 0.083 | 2 S | 0.01 | 0.084 | 2 | 0.01 | 0.079 | 6 S | 0.04 | 9 |
| 10 | 0.080 | 1 S | 0.01 | 0.083 | 3 S | 0.01 | 0.100 | 3 | 0.03 | 10 |
| 11 | 0.078 | 1 S | 0.01 | 0.082 | 3 | 0.01 | 0.080 | 3 | 0.02 | 11 |
| 12 | 0.080 | 2 S | 0.01 | 0.081 | 2 | 0.01 | 0.082 | 3 | 0.02 | 12 |
| 13 | 0.080 | 1 S | 0.01 | 0.081 | 1 S | 0 | 0.082 | 2 | 0.01 | 13 |
| 14 | 0.078 | 1 S | 0.01 | 0.087 | 0 | 0 | 0.078 | 2 | 0.01 | 14 |
| 15 | 0.071 | 1 S | 0.01 | 0.084 | 0 | 0 | 0.085 | 2 | 0.01 | 15 |
| 16 | 0.068 | 1 S | 0.01 | 0.081 | 0 | 0 | 0.080 | 1 | 0.01 | 16 |
| 17 | 0.065 | 0 S | 0 | 0.048 | 1 | 0 | 0.057 | 1 | 0 | 17 |
| 18 | 0.063 | 1 S | 0.01 | 0.051 | 1 S | 0 | 0.082 | 1 | 0.01 | 18 |
| 19 | 0.065 | 2 S | 0.01 | 0.049 | 1 S | 0 | 0.085 | 1 | 0.01 | 19 |
| 20 | 0.067 | 2 S | 0.01 | 0.048 | 0 | 0 | 0.084 | 2 | 0.01 | 20 |
| 21 | 0.065 | 4 S | 0.02 | 0.048 | 0 S | 0 | 0.080 | 6 | 0.03 | 21 |
| 22 | 0.068 | 2 S | 0.01 | 0.045 | 0 | 0 | 0.075 | 4 | 0.03 | 22 |
| 23 | 0.062 | 0 S | 0 | 0.046 | 1 S | 0 | 0.071 | 4 | 0.02 | 23 |
| 24 | 0.061 | 1 S | 0.01 | 0.044 | 1 S | 0 | 0.088 | 3 | 0.02 | 24 |
| 25 | 0.059 | 0 S | 0 | 0.042 | 1 | 0 | 0.088 | 3 S | 0.02 | 25 |
| 26 | 0.058 | 0 S | 0 | 0.039 | 2 | 0.01 | 0.080 B | 4 | 0.03 | 26 |
| 27 | 0.057 | 1 | 0 | 0.047 | 4 S | 0.02 | 0.088 B | 8 S | 0.04 | 27 |
| 28 | 0.058 | 2 S | 0.01 | 0.045 | 6 | 0.02 | 0.078 | 3 | 0.02 | 28 |
| 29 | 0.055 | 1 | 0 | 0.040 | 8 S | 0.02 | 0.074 | 1 S | 0.01 | 29 |
| 30 | 0.055 | 1 | 0 | 0.038 | 5 | 0.02 | 0.068 | 0 S | 0 | 30 |
| 31 | 0.054 | 1 | 0 | 0.038 | 5 | 0.02 | | | | 31 |
| TOTAL | 3.329 | | 0.18 | 1.880 | | 0.19 | 2.077 | | 0.88 | TOTAL |

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

EUNICE CREEK NEAR HINTON - STATION NO. 07AF005

SUSPENDED SEDIMENT FOR 1984

| DAY | OCT DAILY DISCHARGE ($m^3/s$) | OCT MEAN CONCENTRATION (mg/L) | OCT DAILY LOAD (t) | NOV DAILY DISCHARGE ($m^3/s$) | NOV MEAN CONCENTRATION (mg/L) | NOV DAILY LOAD (t) | DEC DAILY DISCHARGE ($m^3/s$) | DEC MEAN CONCENTRATION (mg/L) | DEC DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.078 | 0 S | 0 | | | | | | | 1 |
| 2 | 0.094 | 1 S | 0.01 | | | | | | | 2 |
| 3 | 0.135 | 0 | 0 | | | | | | | 3 |
| 4 | 0.211 | 1 | 0.02 | | | | | | | 4 |
| 5 | 0.281 | 2 | 0.05 | | | | | | | 5 |
| 6 | 0.287 | 2 | 0.05 | | | | | | | 6 |
| 7 | 0.285 | 3 | 0.07 | | | | | | | 7 |
| 8 | 0.352 | 6 | 0.19 | | | | | | | 8 |
| 9 | 0.286 | 5 | 0.11 | | | | | | | 9 |
| 10 | 0.211 | 5 | 0.09 | | | | | | | 10 |
| 11 | 0.190 | 5 | 0.08 | | | | | | | 11 |
| 12 | 0.181 | 4 | 0.06 | | | | | | | 12 |
| 13 | 0.189 | 4 | 0.06 | | | | | | | 13 |
| 14 | 0.155 | 4 | 0.05 | | | | | | | 14 |
| 15 | 0.147 | 3 | 0.04 | | | | | | | 15 |
| 16 | 0.130 | 3 S | 0.03 | | | | | | | 16 |
| 17 | 0.183 B | 3 | 0.05 | | | | | | | 17 |
| 18 | 0.206 B | 3 | 0.05 | | | | | | | 18 |
| 19 | 0.181 B | 3 | 0.05 | | | | | | | 19 |
| 20 | 0.113 B | 3 | 0.03 | | | | | | | 20 |
| 21 | 0.083 B | 3 | 0.02 | | | | | | | 21 |
| 22 | 0.075 B | 3 | 0.02 | | | | | | | 22 |
| 23 | 0.085 B | 3 | 0.02 | | | | | | | 23 |
| 24 | 0.110 | 3 | 0.03 | | | | | | | 24 |
| 25 | 0.106 | 3 | 0.03 | | | | | | | 25 |
| 26 | 0.088 B | 3 | 0.03 | | | | | | | 26 |
| 27 | 0.080 B | 3 | 0.02 | | | | | | | 27 |
| 28 | 0.058 B | 3 | 0.02 | | | | | | | 28 |
| 29 | 0.067 B | 4 | 0.02 | | | | | | | 29 |
| 30 | 0.070 B | 5 | 0.03 | | | | | | | 30 |
| 31 | 0.078 B | 5 S | 0.04 | | | | | | | 31 |
| TOTAL | 4.766 | | 1.37 | | | | | | | TOTAL |

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

EUNICE CREEK NEAR HINTON - STATION NO. 07AF005

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 28 | 09:30 | 0.0 | 0.047 W | 3 | MID | | | | | | | | | | | | 176 | | | | DIP |
| APR 3 | 13:30 | 0.0 | 0.036 W | 1 | MID | | | | | | | | | | | | 182 | | | | DIP |
| APR 6 | 13:55 | 0.0 | 0.032 W | 8 | MID | | | | | | | | | | | | 172 | | | | DIP |
| APR 10 | 12:00 | | 0.029 B | 5 | MID | | | | | | | | | | | | | | | | DIP |
| APR 12 | 13:05 | | 0.034 B | 9 | MID | | | | | | | | | | | | | | | | DIP |
| APR 13 | 08:45 | | 0.033 B | 1 | MID | | | | | | | | | | | | | | | | DIP |
| APR 17 | 12:00E | | 0.122 B | 5 | MID | | | | | | | | | | | | | | | | DIP |
| APR 18 | 12:00E | | 0.130 B | 5 | MID | | | | | | | | | | | | | | | | DIP |
| APR 19 | 12:00E | | 0.128 B | 3 | MID | | | | | | | | | | | | | | | | DIP |
| APR 26 | 12:00E | 0.0 | 0.081 B | 4 | MID | | | | | | | | | | | | | | | | DIP |
| APR 28 | 11:00 | 0.0 | 0.077 W | 1 | MID | | | | | | | | | | | | | | | | DIP |
| APR 29 | 12:00E | 0.8 | 0.072 B | 1 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 1 | 12:00E | 1.0 | 0.074 B | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 2 | 13:35 | 1.7 | 0.081 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 3 | 21:10 | 1.5 | 0.114 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 4 | 15:00 | | 0.105 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 5 | 13:45 | | 0.085 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 6 | 10:50 | 1.0 | 0.108 | 12 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 7 | 12:40 | | 0.114 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 8 | 13:10 | 7.1 | 0.128 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 9 | 14:00 | | 0.167 | 7 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 10 | 11:00 | | 0.148 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 11 | 15:15 | | 0.125 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 12 | 13:35 | | 0.121 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 13 | 13:25 | | 0.135 | 9 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 14 | 09:23 | 1.0 | 0.138 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 15 | 08:55 | | 0.146 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 15 | 17:05 | | 0.163 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 08:45 | | 0.248 | 36 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 12:15 | | 0.332 | 83 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 16:35 | | 0.529 | 141 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 21:35 | | 0.580 | 131 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 17 | 09:10 | | 0.351 | 25 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 18 | 09:25 | | 0.272 | 24 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 19 | 13:00 | | 0.215 | 8 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 20 | 15:20 | 4.5 | 0.190 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 21 | 13:15 | 2.0 | 0.152 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 22 | 13:40 | 4.1 | 0.141 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 23 | 13:35 | 2.7 | 0.135 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 24 | 10:40 | 1.7 | 0.124 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 25 | 10:50 | | 0.112 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 26 | 14:20 | 4.5 | 0.101 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 27 | 14:30 | 4.8 | 0.094 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 28 | 10:25 | 1.5 | 0.088 | 7 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 29 | 10:40 | 3.0 | 0.084 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 30 | 11:12 | | 0.083 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 31 | 12:00 | | 0.087 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 01 | 11:45 | 2.1 | 0.088 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 02 | 10:15 | 2.0 | 0.083 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 03 | 10:13 | 3.3 | 0.080 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 04 | 10:40 | 3.5 | 0.082 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 05 | 13:42 | | 0.127 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 06 | 14:55 | 4.2 | 0.180 | 7 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 07 | 08:50 | | 0.252 | 7 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 07 | 11:20 | | 0.249 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 07 | 22:45 | | 0.386 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 06:20 | | 0.710 | 118 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 08:45 | | 0.762 | 119 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 21:00 | | 0.845 | 128 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 21:45 | | 0.823 | 25 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 09 | 17:15 | 3.8 | 0.583 | 40 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 10 | 11:40 | | 0.469 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 11 | 11:40 | | 0.377 | 9 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 12 | 15:05 | 4.9 | 0.343 | 9 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 13 | 09:15 | 3.3 | 0.339 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 14 | 14:20 | 7.9 | 0.275 | 7 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 15 | 09:10 | 5.1 | 0.305 | 10 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 16 | 14:15 | 5.0 | 0.274 | 6 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 17 | 10:55 | 4.1 | 0.261 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 18 | 11:15 | 5.0 | 0.242 | 5 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 19 | 11:10 | 3.5 | 0.223 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 20 | 13:20 | 5.8 | 0.211 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 21 | 11:12 | | 0.194 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 22 | 10:00 | 4.8 | 0.231 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 23 | 10:15 | 5.3 | 0.185 | 9 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 24 | 10:25 | 10.6 | 0.168 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 25 | 08:35 | | 0.159 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 26 | 09:20 | 4.8 | 0.149 | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 27 | 09:00 | 5.0 | 0.140 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 28 | 09:05 | | 0.130 | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 29 | 10:55 | 5.0 | 0.127 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 30 | 11:25 | 4.8 | 0.128 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 01 | 10:35 | | 0.117 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 02 | 10:00 | 4.3 | 0.108 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 03 | 10:10 | 3.9 | 0.102 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 04 | 10:45 | 5.8 | 0.100 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 05 | 09:00 | 4.5 | 0.098 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 06 | 09:20 | 4.7 | 0.094 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 07 | 13:50 | | 0.091 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 08 | 14:30 | 8.1 | 0.087 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 09 | 12:35 | 5.4 | 0.083 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 10 | 12:00E | 10.2 | 0.080 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 11 | 14:40 | | 0.078 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 12 | 14:00 | 5.8 | 0.085 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 13 | 13:00 | 7.0 | 0.082 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 14 | 10:12 | 5.0 | 0.079 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 15 | 10:03 | 5.2 | 0.073 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 16 | 08:50 | 8.0 | 0.068 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 17 | 10:12 | 5.0 | 0.086 | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 18 | 11:20 | 5.7 | 0.063 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 19 | 12:05 | 6.0 | 0.086 | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 20 | 14:45 | 6.5 | 0.087 | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 21 | 08:55 | | 0.084 | 6 | MID | | | | | | | | | | | | | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): B - ICE CONDITIONS W - DAILY MEAN; ICE CONDITIONS

CONTINUED

EUNICE CREEK NEAR HINTON - STATION NO. 07AF005 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JUL 22 | 09:35 | 2.8 | 0.056 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 23 | 13:20 | 7.5 | 0.062 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 24 | 14:00 | 8.1 | 0.060 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 25 | 11:20 | 6.0 | 0.060 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 26 | 11:20 | | 0.059 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 28 | 10:20 | | 0.056 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 10 | 14:20 | 9.1 | 0.053 | | 4 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 13 | 09:50 | 5.8 | 0.052 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 18 | 12:00E | | 0.051 | H | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 19 | 09:55 | 4.5 | 0.050 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 21 | 13:13 | 7.0 | 0.048 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 23 | 10:20 | | 0.048 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 24 | 11:50 | 5.5 | 0.044 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 27 | 08:30 | | 0.040 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 29 | 11:30 | | 0.041 | | 6 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 05 | 14:18 | | 0.031 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 08:09 | | 0.045 | | 8 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 09:00 | | 0.052 | | 8 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 13:00 | | 0.091 | | 7 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 18:16 | | 0.188 | | 58 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 21:50 | | 0.167 | | 22 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 07 | 10:03 | | 0.117 | H | 0 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 08 | 10:08 | | 0.078 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 09 | 10:20 | | 0.088 | | 14 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 08 | 15:07 | | 0.086 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 08 | 18:15 | | 0.091 | | 4 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 25 | 13:10 | 1.0 | 0.085 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 27 | 14:20 | | 0.085 | | 5 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 29 | 15:40 | | 0.067 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 30 | 13:15 | 2.0 | 0.067 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 01 | 14:34 | | 0.076 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 02 | 15:10 | | 0.094 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 02 | 22:55 | | 0.115 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 15 | 15:40 | 2.0 | 0.133 | | 3 | MID | | | | | | | | | | | | 121 | | | | DIP |
| OCT 31 | 13:15 | 0.0 | 0.078 | | 6 | MID | | | | | | | | | | | | | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN

EUNICE CREEK NEAR HINTON - STATION NO. 07AF005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | TOTAL FOR PERIOD (TONNES) | | SUMMARY : APR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | SEP-OCT # | M-MS | 2 | OCT 04 | 0 | SEP 20 * | 0.01 | OCT 04 | --- | | --- | --- | --- |
| 1968 | MAY-OCT | M-S | 85 | JUN 12 | 1 | SEP 11 | 4.29 | JUN 30 | 53.2 | | --- | --- | --- |
| 1969 | MAY-OCT | M-S | 508 | AUG 05 | 1 | JUN 12 | 125 | AUG 05 | 570 | * | --- | --- | --- |
| 1970 | MAY-OCT | M-S | 132 | MAY 10 | 1 | SEP 08 | 20.8 | JUN 15 | 70.6 | | --- | --- | --- |
| 1971 | APR-OCT | M-S | 345 | JUN 08 | 1 | AUG 11 | 84.8 | JUN 09 | 298 | | 1.40 | 1.40 | --- |
| 1972 | MAY-OCT | M-S | 388 | JUN 25 | 0 | AUG 09 | 88.6 | JUN 25 | 227 | | --- | --- | --- |
| 1973 | APR-NOV | M-S | 401 | JUN 24 | 1 | JUL 10 | 84.6 | MAY 15 | 410 | | 1.92 | 1.68 | 15.7 |
| 1974 | APR-OCT | M-S | 124 | JUL 12 | 1 | AUG 05 | 8.88 | MAY 05 | 105 | | 0.50 | 1.27 | 32.7 |
| 1975 | APR-OCT | M-S | 125 | MAY 08 | 0 | JUN 11 | 7.58 | MAY 09 | 34.7 | | 0.17 | 1.00 | 40.3 |
| 1976 | APR-OCT | M-S | 111 | JUN 15 | 0 | JUL 27 | 5.19 | JUN 15 | 32.4 | | 0.15 | 0.83 | 42.7 |
| 1977 | MAR-OCT | M-S | 408 | MAY 11 | 0 | SEP 14 | 41.6 | MAY 11 | 462 | | 2.15 | 1.05 | 34.7 |
| 1978 | APR-NOV | M-S | 257 | MAY 15 | 1 | SEP 01 | 45.1 | MAY 15 | 147 | | 0.69 | 1.00 | 31.2 |
| 1979 | MAY-SEP | M-S | 370 | JUN 20 | 0 | JUL 19 | 24.3 | JUN 20 | 51.7 | | --- | --- | --- |
| 1980 | APR-SEP | M-S | 130 | JUN 02 | 0 | MAY 15 | 202 | JUN 04 | 530 | * | --- | --- | --- |
| 1981 | MAY-SEP | M-S | 73 | MAY 15 | 1 | JUL 05 | 3.85 | JUL 30 | 31.4 | | --- | --- | --- |
| 1982 | APR-NOV | M-S | 882 | JUL 04 | 3 | SEP 14 | 125 | JUL 04 | 333 | | 1.58 | 1.07 | 26.1 |
| 1983 | APR-NOV | M-S | 120 | JUN 24 | 1 | JUN 08 | 7.32 | JUN 24 | 28.2 | | 0.14 | 0.97 | 27.5 |
| 1984 | MAR-OCT | M-S | 141 | MAY 15 | 0 | MAY 27 | 6.50 | JUN 08 | 18.4 | | 0.09 | 0.88 | 28.9 |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

FIREBAG RIVER NEAR THE MOUTH - STATION NO. 07DC001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 22 | 11:55 | 10.0 | 22.5 | 18 | 42.0 | | | | | | | | | | | | 145 | | | | DIP |
| AUG 11 | 10:55 | | 53.4 | 35 | 30.0 | | | | | | | | | | | | 158 | | | | DIP |
| SEP 21 | 09:15 | | 28.7 | 7 | 45.0 | | | | | | | | | | | | 159 | | | | DIP |
| OCT 03 | 15:30 | 8.0 | 24.1 | 4 | WERB | | | | | | | | | | | | 151 | | | | DIP |

NOTE : SINGLE VERTICAL IS UNDETERMINED

FIREBAG RIVER NEAR THE MOUTH - STATION NO. 07DC001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | JUN-NOV # | M-MS | 12 | JUN 12 | 3 | NOV 02 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 71 | APR 27 | 4 | SEP 22 | --- | --- | --- | --- | --- |
| 1978 | APR-AUG # | M-MS | 313 | APR 28 * | 7 | JUL 05 | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 118 | MAY 22 | 8 | AUG 23 | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 49 | APR 23 | 4 | OCT 26 | --- | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 32 | JUL 15 | 2 | AUG 30 * | --- | --- | --- | --- | --- |
| 1982 | MAY-SEP # | M-MS | 45 | MAY 18 | 5 | JUN 23 | --- | --- | --- | --- | --- |
| 1983 | APR-SEP # | M-MS | 84 | APR 26 | 3 | SEP 15 | --- | --- | --- | --- | --- |
| 1984 | MAY-OCT | M-MS | 35 | AUG 11 | 4 | OCT 03 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

FISH CREEK NEAR PRIDDIS - STATION NO. 05BK001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-JUN # | M-MS | 107 | APR 08 * | 1 | MAY 17 * | --- | --- | --- | --- | --- |
| 1976 | MAY-SEP # | M-MS | 15 | SEP 24 | 1 | MAY 13 | --- | --- | --- | --- | --- |
| 1977 | MAY-MAY | M-MS | 15 | MAY 17 | 15 | MAY 17 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

FLETCHER CHANNEL BELOW DIVERGENCE - STATION NO. 07DD004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | MAY-DEC # | M-MS | 1 850 | JUL 18 | 8 | DEC 20 * | --- | --- | --- | --- | --- |
| 1972 | JUL-AUG # | M-MS | 1 180 | JUL 05 | 76 | AUG 23 | --- | --- | --- | --- | --- |
| 1973 | JUN-OCT # | M-MS | 313 | APR 29 | 7 | JUL 05 | --- | --- | --- | --- | --- |
| 1974 | JUN-SEP # | M-MS | 398 | JUN 26 | 22 | SEP 30 | --- | --- | --- | --- | --- |
| 1975 | MAY-OCT # | M-MS | 1 230 | AUG 30 | 49 | JUN 08 | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 781 | MAY 20 | 57 | OCT 04 | --- | --- | --- | --- | --- |
| 1978 | JUN-OCT # | M-MS | 720 | SEP 12 | 78 | AUG 21 | --- | --- | --- | --- | --- |
| 1979 | JUN-OCT # | M-MS | 435 | JUL 11 | 52 | SEP 05 | --- | --- | --- | --- | --- |
| 1980 | JUN-OCT # | M-MS | 3 230 | JUN 12 * | 75 | OCT 07 | --- | --- | --- | --- | --- |
| 1981 | JUN-OCT # | M-MS | 236 | JUL 31 | 12 | OCT 02 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

FORTY MILE CREEK NEAR BANFF - STATION NO. 05BB003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAY-AUG MEAN LOAD (TONNES) | SUMMARY : MAY-AUG HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAY-AUG STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-SEP | M-S | 150 | JUN 01 * | 0 | AUG 08 * | 219 | JUN 01 * | 1 290 * | 10.4 | 10.4 | --- |
| 1973 | MAY-AUG | M-S | 43 | JUN 24 | 1 | AUG 03 | 46.4 | JUN 24 | 412 | 3.35 | 6.88 | 51.3 |

M - MANUAL SAMPLING

S - SEASONAL OPERATION

* - EXTREME FOR PERIOD OF RECORD

FREEMAN RIVER NEAR FORT ASSINIBOINE - STATION NO. 07AH001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 01 | 11:40 | 5.0 | 4.42 | 15 | 12.0 | | | | | | | | | | | | 135 | | | | DH48 |
| JUN 08 | 17:50 | 10.0 | 217 | 2340 | 15.0 | 16 | 21 | 32 | 41 | 58 | 75 | 92 | 99 | 100 | | | 138 | 24 | 55 | 21 | DH59 |
| JUN 27 | 12:30 | 19.0 | 10.9 | 35 | 3.5 | | | | | | | | | | | | 137 | | | | DH48 |
| JUL 25 | 11:20 | 19.0 | 6.89 | 11 | MID | | | | | | | | | | | | 123 | | | | --- |
| SEP 06 | 14:00 | 15.0 | 2.98 | 7 | 13.4 | | | | | | | | | | | | 143 | | | | --- |

NOTE : SINGLE VERTICAL IS UNDETERMINED

FREEMAN RIVER NEAR FORT ASSINIBOINE - STATION NO. 07AH001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | JUL-OCT # | M-MS | 1 200 | JUL 15 | 5 | OCT 28 | --- | --- | --- | --- | --- |
| 1975 | APR-SEP # | M-MS | 781 | APR 23 | 5 | AUG 19 | --- | --- | --- | --- | --- |
| 1976 | APR-SEP # | M-MS | 297 | APR 21 | 6 | JUN 23 | --- | --- | --- | --- | --- |
| 1977 | APR-SEP # | M-MS | 455 | APR 18 | 5 | AUG 23 | --- | --- | --- | --- | --- |
| 1978 | APR-NOV # | M-MS | 853 | JUN 16 | 10 | AUG 30 | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 2 860 | JUN 15 * | 7 | SEP 20 | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 1 110 | APR 18 | 8 | OCT 18 | --- | --- | --- | --- | --- |
| 1981 | APR-OCT # | M-MS | 285 | APR 23 | 3 | SEP 09 * | --- | --- | --- | --- | --- |
| 1982 | JUN-NOV # | M-MS | 114 | JUL 08 | 5 | JUN 24 | --- | --- | --- | --- | --- |
| 1983 | JUL-SEP # | M-MS | 568 | JUL 05 | 7 | AUG 30 | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 2 340 | JUN 08 | 7 | SEP 05 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

GOOSE ISLAND CHANNEL BELOW DIVERGENCE - STATION NO. 07DD005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | MAY-DEC # | M-MS | 1 780 | JUN 16 | 8 | DEC 21 * | --- | --- | --- | --- | --- |
| 1972 | JUL-AUG # | M-MS | 927 | JUL 07 | 88 | AUG 24 | --- | --- | --- | --- | --- |
| 1973 | JUN-OCT # | M-MS | 313 | APR 28 | 7 | JUL 05 | --- | --- | --- | --- | --- |
| 1974 | JUN-OCT # | M-MS | 426 | JUN 27 | 30 | OCT 17 | --- | --- | --- | --- | --- |
| 1976 | MAY-OCT # | M-MS | 818 | AUG 30 | 44 | JUN 08 | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 597 | MAY 20 | 46 | SEP 19 | --- | --- | --- | --- | --- |
| 1978 | JUN-OCT # | M-MS | 565 | SEP 12 | 85 | AUG 21 | --- | --- | --- | --- | --- |
| 1979 | JUN-OCT # | M-MS | 424 | JUL 11 | 52 | SEP 05 | --- | --- | --- | --- | --- |
| 1980 | JUN-OCT # | M-MS | 3 220 | JUN 12 * | 81 | OCT 07 | --- | --- | --- | --- | --- |
| 1981 | JUN-OCT # | M-MS | 227 | JUL 30 | 21 | OCT 02 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

HANGINGSTONE RIVER AT FOR MCMURRAY - STATION NO. 07CD004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1978 | APR-SEP # | M-MS | 2 880 | APR 28 * | 7 | AUG 01 | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 727 | MAY 10 | 14 | JUL 05 | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 189 | SEP 17 | 8 | MAY 24 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

HARTLEY CREEK NEAR FORT MACKAY - STATION NO. 07DA008

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 22 | 09:15 | | 0.377 | 7 | MID | | | | | | | | | | | | 208 | | | | DIP |
| AUG 11 | 16:40 | 20.0 | 0.784 | 4 | MID | | | | | | | | | | | | 243 | | | | DIP |
| SEP 21 | 11:45 | 10.0 | 1.08 | 8 | MID | | | | | | | | | | | | 195 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

HARTLEY CREEK NEAR FORT MACKAY - STATION NO. 07DA008

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-NOV # | M-MS | 58 APR 15 | | 2 NOV 02 | | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 39 APR 21 | | 2 SEP 22 | | --- | --- | --- | --- | --- |
| 1978 | APR-SEP # | M-MS | 106 AUG 21 | * | 3 JUN 26 | | --- | --- | --- | --- | --- |
| 1979 | APR-OCT # | M-MS | 40 MAY 03 | | 8 JUN 26 | | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 84 SEP 18 | | 5 MAY 25 | | --- | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 12 AUG 29 | | 4 MAY 28 | | --- | --- | --- | --- | --- |
| 1982 | MAY-AUG # | M-MS | 19 MAY 19 | | 1 AUG 03 | * | --- | --- | --- | --- | --- |
| 1983 | APR-SEP # | M-MS | 7 APR 27 | | 2 AUG 05 | | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 8 SEP 21 | | 4 AUG 11 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

HIGHWOOD RIVER AT DIEBEL'S RANCH - STATION NO. 05BL019

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-JUN # | M-MS | 554 JUN 02 | * | 1 MAY 03 | * | --- | --- | --- | --- | --- |
| 1976 | MAY-AUG # | M-MS | 13 MAY 13 | | 4 AUG 04 | | --- | --- | --- | --- | --- |
| 1977 | MAY-MAY # | M-MS | 12 MAY 24 | | 2 MAY 16 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

HIGHWOOD RIVER BELOW PICKLEJAR CREEK - STATION NO. 05BL021

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | MAY-AUG # | M-MS | 19 MAY 13 | * | 3 AUG 04 | | --- | --- | --- | --- | --- |
| 1977 | MAY-MAY # | M-MS | 5 MAY 24 | | 2 MAY 16 | * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

HIGHWOOD RIVER NEAR ALDERSYDE - STATION NO. 05BL009

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | MAY-SEP # | M-MS | 89 | MAY 14 * | 1 | AUG 03 * | --- | --- | --- | --- | --- |
| 1977 | MAY-MAY | M-MS | 3 | MAY 17 | 3 | MAY 17 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

HIGHWOOD RIVER NEAR THE MOUTH - STATION NO. 05BL024

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY | 02 13:15 | 9.0 | 4.64 | 3 | MID | | | | | | | | | | | | 247 | | | | DH48 |
| MAY | 30 14:15 | 14.0 | 25.5 | 37 | MID | | | | | | | | | | | | 215 | | | | DH48 |
| JUN | 21 14:00 | 13.0 | 34.8 | 14 | MID | | | | | | | | | | | | 179 | | | | DH48 |
| AUG | 2 07:30 | 18.0 | 5.07 | 5 | MID | | | | | | | | | | | | 185 | | | | DH48 |
| SEP | 5 14:45 | 18.0 | 3.57 | 5 | MID | | | | | | | | | | | | 191 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

HIGHWOOD RIVER NEAR THE MOUTH - STATION NO. 05BL024

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1970 | MAY-AUG | M-S | 8 870 | JUN 14 * | 0 | AUG 28 * | 254 000 | JUN 14 * | 380 000 * | --- | --- | --- |
| 1971 | OCT-DEC | M-S | 13 | OCT 28 | 3 | OCT 13 | 5.75 | OCT 28 | 192 | --- | --- | --- |
| 1972 | JAN-DEC | M-C | 1 480 | JUN 01 | 3 | FEB 21 | 28 200 | JUN 01 | 240 000 | 980 | 880 | --- |
| 1973 | JAN-DEC | M-C | 1 310 | MAY 28 | 0 | JAN 03 | 16 300 | MAY 27 | 78 200 | 323 | 852 | 80.4 |
| 1974 | JAN-DEC | M-C | 1 910 | APR 30 | 0 | SEP 04 | 25 800 | JUN 17 | 321 000 | 1 310 | 871 | 33.3 |
| 1975 | JAN-DEC | M-C | 3 010 | JUN 20 | 0 | SEP 28 | 75 900 | JUN 20 | 217 000 | 887 | 875 | 33.4 |
| 1976 | JAN-DEC | M-C | 327 | MAY 11 | 0 | DEC 14 | 7 810 | AUG 05 | 30 400 | 124 | 725 | 30.2 |
| 1977 | JAN-DEC | M-C | 700 | APR 05 | 1 | JUN 29 | 1 610 | APR 05 | 5 880 | 22.3 | 804 | 35.1 |
| 1978 | JAN-DEC | M-C | 1 020 | JUN 05 | 2 | SEP 24 | 13 400 | JUN 05 | 103 000 | 415 | 580 | 31.5 |
| 1979 | JAN-NOV # | M-S | 836 | MAY 24 | 0 | JUL 13 | 7 880 | MAY 27 | 48 100 | 200 | 833 | 31.0 |
| 1980 | MAR-NOV # | M-S | 1 380 | JUN 03 | 4 | NOV 05 | 16 300 | JUN 03 | 103 000 | 421 | 520 | 28.1 |
| 1981 | MAR-OCT # | M-MS | 1 340 | MAY 21 | 3 | SEP 28 | | --- | --- | --- | --- | --- |
| 1982 | APR-SEP # | M-MS | 170 | JUN 14 | 3 | JUL 28 | | --- | --- | --- | --- | --- |
| 1983 | APR-AUG # | M-MS | 136 | MAY 26 | 3 | AUG 30 | | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 37 | MAY 30 | 3 | MAY 02 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## HORSE CREEK NEAR VALLEYVIEW - STATION NO. 07GF007

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1970 | APR-OCT | M-S | 28 | APR 20 | 3 | MAY 27 | 0.79 | APR 23 | 3.18 | | --- | --- | --- |
| 1971 | MAR-OCT | M-S | 82 | APR 20 | 0 | MAY 17 * | 4.53 | JUN 27 * | 17.5 | | 0.08 | 0.08 | --- |
| 1972 | MAR-OCT | M-S | 45 | APR 19 | 2 | MAY 18 | 1.67 | APR 15 | 8.89 | | 0.04 | 0.06 | 33.3 |
| 1973 | MAR-NOV | M-S | 16 | APR 09 | 0 | MAY 07 | 0.91 | APR 23 | 7.24 | | 0.03 | 0.05 | 30.5 |
| 1974 | MAR-OCT | M-S | 82 | APR 25 | 0 | JUL 10 | 4.31 | APR 23 | 31.2 * | | 0.13 | 0.07 | 32.6 |
| 1975 | MAY-JUN # | M-MS | 4 | MAY 30 | 4 | MAY 30 | --- | | --- | | --- | --- | --- |
| 1978 | AUG-OCT # | M-MS | 158 | SEP 18 | 5 | OCT 17 | --- | | --- | | --- | --- | --- |
| 1979 | MAY-AUG # | M-MS | 301 | MAY 17 * | 12 | JUL 08 | --- | | --- | | --- | --- | --- |
| 1980 | APR-NOV # | M-MS | 210 | APR 17 | 4 | SEP 15 | --- | | --- | | --- | --- | --- |
| 1981 | MAR-JUL # | M-MS | 78 | JUL 20 | 4 | MAY 11 | --- | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## JACKFISH CREEK ABOVE ATHABASCA RIVER - STATION NO. 07DD005

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | JUL-AUG # | M-MS | 37 | JUL 05 | 15 | JUL 18 * | --- | --- | --- | --- | --- |
| 1973 | JUN-OCT # | M-MS | 488 | JUN 07 * | 15 | JUN 25 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## JAMES RIVER NEAR SUNDRE - STATION NO. 05CA002

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | APR-JUN # | M-MS | 226 | MAY 18 * | 10 | JUN 03 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## JOSLYN CREEK NEAR FORT MACKAY - STATION NO. 07DA010

### INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 22 | 17:40 | 12.0 | 1.31 | 154 | MID | | | | | | | | | | | | 326 | | | | DH48 |
| AUG 10 | 14:00 | 22.0 | 0.408 | 88 | MID | | | | | | | | | | | | 316 | | | | DH48 |
| SEP 22 | 13:30 | 8.0 | 0.358 | 49 | MID | | | | | | | | | | | | 361 | | | | DH48 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

JOSLYN CREEK NEAR FORT MACKAY - STATION NO. 07DA018

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-NOV # | M-MS | 1 100 | APR 15 | 37 | NOV 04 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 142 | MAY 04 | 11 | SEP 19 | --- | --- | --- | --- | --- |
| 1978 | APR-SEP # | M-MS | 2 380 | MAY 01 * | 13 | AUG 22 | --- | --- | --- | --- | --- |
| 1979 | APR-OCT # | M-MS | 544 | MAY 30 | 19 | OCT 17 | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 118 | APR 24 | 5 | JUN 24 * | --- | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 254 | MAY 26 | 8 | AUG 28 | --- | --- | --- | --- | --- |
| 1982 | JUN-SEP # | M-MS | 33 | JUN 24 | 17 | AUG 03 | --- | --- | --- | --- | --- |
| 1983 | APR-SEP # | M-MS | 2 040 | APR 26 | 17 | SEP 14 | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 154 | MAY 22 | 49 | SEP 22 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

JUMPINGPOUND CREEK NEAR THE MOUTH - STATION NO. 05BH005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-JUN # | M-MS | 123 | APR 05 * | 4 | MAY 02 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

KEG RIVER AT HIGHWAY NO. 35 - STATION NO. 07HF002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 04 | 13:15 | 8.5 | 0.484 | 51 | MID | | | | | | | | | | | | 254 | | | | DH48 |
| MAY 22 | 13:03 | 5.0 | 16.2 | 1270 | MID | | | | | | | | | | | | 196 | | | | DH59 |
| MAY 29 | 11:05 | 8.5 | 5.72 | 206 | MID | | | | | | | | | | | | 161 | | | | DH48 |
| JUN 18 | 11:30 | 14.5 | 1.78 | 72 | MID | | | | | | | | | | | | 244 | | | | DH48 |
| JUL 09 | 12:30 | 13.5 | 18.8 | 1000 | MID | 28 | 42 | 64 | 77 | 92 | 97 | 98 | 100 | | | | 210 | 3 | 55 | 42 | DH59 |
| AUG 03 | 10:05 | 21.5 | 0.372 | 51 | MID | | | | | | | | | | | | 305 | | | | DH48 |
| AUG 27 | 11:25 | 13.5 | 0.177 | 45 | MID | | | | | | | | | | | | 316 | | | | DH48 |
| SEP 24 | 10:50 | 5.0 | 0.881 | 72 | MID | | | | | | | | | | | | 235 | | | | DH48 |
| OCT 29 | 12:00 | 0.0 | 0.710 B | 86 | MID | | | | | | | | | | | | 306 | | | | DH48 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): B - ICE CONDITIONS

KEG RIVER AT HIGHWAY NO. 35 - STATION NO. 07HF002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | SEP-OCT # | M-MS | 24 | SEP 18 | 17 | OCT 31 | --- | --- | --- | --- | --- |
| 1975 | APR-OCT # | M-MS | 499 | JUN 06 | 18 | OCT 30 | --- | --- | --- | --- | --- |
| 1976 | APR-OCT # | M-MS | 1 040 | JUN 28 | 21 | SEP 30 | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 808 | JUN 13 | 23 | OCT 25 | --- | --- | --- | --- | --- |
| 1978 | MAY-OCT # | M-MS | 2 050 | MAY 23 | 34 | OCT 27 | --- | --- | --- | --- | --- |
| 1979 | JUN-NOV # | M-MS | 3 850 * | JUN 28 | 16 * | NOV 02 | --- | --- | --- | --- | --- |
| 1980 | APR-AUG # | M-MS | 184 | APR 25 | 27 | JUL 03 | --- | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 738 | MAY 04 | 27 | JUN 28 | --- | --- | --- | --- | --- |
| 1982 | MAY-OCT # | M-MS | 481 | MAY 08 | 16 | OCT 25 | --- | --- | --- | --- | --- |
| 1983 | MAY-SEP # | M-MS | 111 | MAY 05 | 40 | AUG 11 | --- | --- | --- | --- | --- |
| 1984 | MAY-OCT | M-MS | 1 270 | MAY 22 | 45 | AUG 27 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

LAKE CLAIRE NEAR OUTLET TO PRAIRIE RIVER - STATION NO. 07KF002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | JUN-OCT # | M-MS | 751 | AUG 07 * | 177 | JUN 13 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

LEE CREEK AT BEAZER - STATION NO. 05AE037

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1979 | JUL-AUG # | M-MS | 20 | JUL 31 | 2 | AUG 13 | --- | --- | --- | --- | --- |
| 1981 | JUN-SEP # | M-MS | 108 | JUN 11 * | 83 | SEP 02 | --- | --- | --- | --- | --- |
| 1982 | JUN-OCT # | M-MS | 60 | JUL 22 | 1 | OCT 26 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

LEE CREEK AT CARDSTON - STATION NO. 05AE002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-MAY # | M-MS | 1 620 | MAY 25 * | 158 | MAY 05 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

LESSER SLAVE LAKE AT SAWRIDGE - STATION NO. 07BK010

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1981 | MAY-OCT # | M-MS | 34 | JUL 07 * | 3 | JUL 23 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

LESSER SLAVE LAKE AT SLAVE LAKE - STATION NO. 07BJ005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1980 | JUL-JUL | M-MS | 7 | JUL 16 * | 7 | JUL 16 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

LESSER SLAVE RIVER AT HIGHWAY NO. 2A - STATION NO. 07BK005

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 55 17 39 N LONG 114 35 28 W
DRAINAGE AREA: 14 400 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 71 411.9 TONNES FOR THE PERIOD MAR 21 TO SEP 30

REMARKS:

| | MAR | | | APR | | | MAY | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 47.0 | | | 42.7 | 28 | 107 | 42.3 | 20 | 73.1 | 1 |
| 2 | 46.9 | | | 43.1 | 26 S | 96.8 | 41.1 | 20 | 71.0 | 2 |
| 3 | 47.3 | | | 43.0 | 21 S | 78.0 | 44.0 | 31 S | 118 | 3 |
| 4 | 47.0 | | | 43.0 | 24 | 89.2 | 45.3 | 47 S | 184 | 4 |
| 5 | 47.0 | | | 42.5 | 26 S | 97.7 | 44.3 | 48 | 178 | 5 |
| 6 | 46.7 | | | 44.0 | 26 S | 98.8 | 43.4 | 44 | 165 | 6 |
| 7 | 46.1 | | | 44.5 | 28 | 100 0 | 42.5 | 41 S | 151 | 7 |
| 8 | 45.7 | | | 44.2 | 26 | 99.3 | 39.4 | 35 | 118 | 8 |
| 9 | 45.4 | | | 44.2 | 27 S | 103 | 38.5 | 32 S | 107 | 9 |
| 10 | 45.2 | | | 44.0 | 24 | 91.2 | 39.9 | 39 | 134 | 10 |
| 11 | 44.8 | | | 44.4 | 25 S | 95.9 | 41.4 | 53 S | 190 | 11 |
| 12 | 44.9 | | | 44.6 | 28 | 108 | 38.8 | 39 | 131 | 12 |
| 13 | 44.5 | | | 44.5 | 30 S | 115 | 38.1 | 39 | 128 | 13 |
| 14 | 44.4 | | | 44.2 | 30 | 115 | 37.2 | 34 S | 109 | 14 |
| 15 | 45.8 | | | 44.3 | 32 | 122 | 38.5 | 39 | 130 | 15 |
| 16 | 47.5 | | | 45.9 | 39 S | 155 | 39.1 | 45 | 152 | 16 |
| 17 | 43.3 | | | 45.9 | 34 | 138 | 45.0 | 113 S | 439 | 17 |
| 18 | 42.8 | | | 46.3 | 29 S | 116 | 47.4 | 108 S | 445 | 18 |
| 19 | 43.4 | | | 46.3 | 33 | 132 | 44.1 | 85 | 324 | 19 |
| 20 | 43.5 | | | 46.1 | 37 S | 147 | 47.9 | 111 | 459 | 20 |
| 21 | 42.7 | 26 S | 92.2 | 45.0 | 34 | 132 | 54.0 | 138 | 644 | 21 |
| 22 | 43.1 | 21 S | 78.2 | 43.2 | 35 | 131 | 54.5 | 108 S | 509 | 22 |
| 23 | 42.9 | 23 | 85.3 | 44.8 | 36 S | 140 | 53.2 | 88 S | 404 | 23 |
| 24 | 43.3 | 26 | 97.3 | 46.5 | 31 | 125 | 57.8 | 84 | 417 | 24 |
| 25 | 43.0 | 28 | 95.6 | 44.5 | 22 S | 84.5 | 59.0 | 78 S | 387 | 25 |
| 26 | 42.8 | 25 S | 92.4 | 45.5 | 23 | 90.4 | 58.7 | 70 | 355 | 26 |
| 27 | 42.8 | 23 | 85.3 | 45.6 | 32 S | 88.7 | 59.2 | 75 | 384 | 27 |
| 28 | 42.7 | 22 S | 81.2 | 45.0 | 32 | 85.5 | 58.5 | 75 S | 380 | 28 |
| 29 | 42.8 | 26 | 96.4 | 44.4 | 24 | 92.1 | 58.4 | 75 | 383 | 29 |
| 30 | 42.8 | 39 S | 145 | 44.1 | 23 S | 87.8 | 58.8 | 67 S | 380 | 30 |
| 31 | 42.8 | 38 | 144 | | | | 58.4 | 61 | 329 | 31 |
| TOTAL | 1 381.0 | | 1 083.9 | 1 338.4 | | 3 259.8 | 1 472.7 | | 8 388.1 | TOTAL |

| | JUN | | | JUL | | | AUG | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 83.3 | 101 S | 727 | 72.8 | 180 | 1 010 | 58.0 | 88 | 441 | 1 |
| 2 | 83.8 | 103 | 748 | 89.4 | 162 | 881 | 58.8 | 107 | 545 | 2 |
| 3 | 81.4 | 87 | 682 | 85.2 | 111 S | 625 | 59.8 | 118 | 610 | 3 |
| 4 | 73.2 | 89 S | 563 | 82.0 | 76 S | 386 | 60.1 | 133 S | 639 | 4 |
| 5 | 67.8 | 84 | 491 | 80.4 | 83 S | 329 | 59.4 | 107 | 549 | 5 |
| 6 | 68.4 | 102 | 603 | 84.1 | 85 S | 478 | 58.1 | 78 S | 388 | 6 |
| 7 | 81.0 | 220 S | 1 540 | 73.6 | 101 | 642 | 62.0 | 102 S | 545 | 7 |
| 8 | 92.5 | 504 S | 4 030 | 78.0 | 77 | 519 | 62.8 | 108 S | 585 | 8 |
| 9 | 80.7 | 384 | 2 850 | 81.7 | 113 S | 788 | 57.5 | 68 S | 285 | 9 |
| 10 | 69.7 | 212 | 1 570 | 80.3 | 78 S | 648 | 58.4 | 60 | 303 | 10 |
| 11 | 81.5 | 109 | 788 | 74.8 | 85 S | 557 | 57.5 | 61 S | 253 | 11 |
| 12 | 76.1 | 80 S | 607 | 72.1 | 86 S | 424 | 55.9 | 41 | 194 | 12 |
| 13 | 76.1 | 82 S | 625 | 72.6 | 75 S | 470 | 58.6 | 72 S | 365 | 13 |
| 14 | 73.1 | 137 | 865 | 73.3 | 101 | 640 | 58.8 | 77 S | 390 | 14 |
| 15 | 72.5 | 205 S | 1 280 | 71.7 | 106 | 687 | 57.0 | 62 S | 256 | 15 |
| 16 | 71.4 | 119 | 734 | 69.3 | 88 S | 587 | 57.9 | 45 S | 235 | 16 |
| 17 | 72.1 | 114 | 710 | 68.4 | 90 S | 532 | 57.0 | 42 S | 207 | 17 |
| 18 | 86.8 | 101 S | 801 | 68.5 | 90 S | 517 | 57.8 | 51 | 254 | 18 |
| 19 | 87.5 | 101 | 888 | 65.3 | 82 S | 483 | 57.5 | 55 | 278 | 19 |
| 20 | 88.9 | 100 S | 978 | 65.3 | 81 S | 457 | 59.9 | 66 S | 342 | 20 |
| 21 | 88.5 | 93 | 839 | 66.2 | 87 | 383 | 57.7 | 56 S | 289 | 21 |
| 22 | 85.8 | 77 S | 638 | 66.1 | 85 | 371 | 56.7 | 45 S | 217 | 22 |
| 23 | 85.1 | 70 | 594 | 63.8 | 70 S | 386 | 56.2 | 49 | 238 | 23 |
| 24 | 84.8 | 77 | 631 | 62.6 | 75 S | 408 | 55.8 | 47 | 227 | 24 |
| 25 | 86.4 | 84 S | 838 | 62.6 | 75 S | 406 | 56.5 | 46 | 225 | 25 |
| 26 | 84.3 | 63 S | 550 | 60.7 | 78 S | 399 | 57.6 | 47 | 234 | 26 |
| 27 | 85.1 | 78 S | 644 | 61.6 | 84 S | 447 | 58.3 | 43 | 209 | 27 |
| 28 | 83.2 | 72 | 583 | 62.6 | 95 | 514 | 64.2 | 86 | 533 | 28 |
| 29 | 82.8 | 87 | 594 | 62.2 | 94 | 505 | 67.0 | 103 | 598 | 29 |
| 30 | 76.1 | 175 | 1 150 | 61.3 | 84 | 488 | 65.8 | 73 S | 352 | 30 |
| 31 | | | | 59.6 | 87 | 448 | 49.9 | 80 | 318 | 31 |
| TOTAL | 2 183.8 | | 28 081 | 2 096.3 | | 15 261 | 1 806.2 | | 10 989 | TOTAL |

S - SAMPLE(S) COLLECTED THIS DAY

LESSER SLAVE RIVER AT HIGHWAY NO. 2A - STATION NO. 07BK005

SUSPENDED SEDIMENT FOR 1984

| | SEP | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 50.7 | 55 | 241 | | | | | | | 1 |
| 2 | 80.1 | 79 | 410 | | | | | | | 2 |
| 3 | 53.8 | 47 | 218 | | | | | | | 3 |
| 4 | 46.1 | 32 S | 133 | | | | | | | 4 |
| 5 | 49.5 | 37 S | 158 | | | | | | | 5 |
| 6 | 50.8 | 38 S | 171 | | | | | | | 6 |
| 7 | 81.7 | 88 S | 476 | | | | | | | 7 |
| 8 | 87.5 | 84 | 480 | | | | | | | 8 |
| 9 | 84.4 | 70 | 388 | | | | | | | 9 |
| 10 | 81.4 | 86 S | 350 | | | | | | | 10 |
| 11 | 59.0 | 62 S | 316 | | | | | | | 11 |
| 12 | 56.0 | 63 S | 266 | | | | | | | 12 |
| 13 | 57.8 | 50 S | 250 | | | | | | | 13 |
| 14 | 57.0 | 41 S | 202 | | | | | | | 14 |
| 15 | 53.9 | 33 | 154 | | | | | | | 15 |
| 16 | 55.0 | 39 | 185 | | | | | | | 16 |
| 17 | 56.0 | 41 | 198 | | | | | | | 17 |
| 18 | 55.4 | 36 | 172 | | | | | | | 18 |
| 19 | 55.8 | 38 | 185 | | | | | | | 19 |
| 20 | 54.2 | 34 | 159 | | | | | | | 20 |
| 21 | 52.5 | 33 | 150 | | | | | | | 21 |
| 22 | 52.3 | 34 | 154 | | | | | | | 22 |
| 23 | 52.0 | 33 | 148 | | | | | | | 23 |
| 24 | 52.1 | 33 | 149 | | | | | | | 24 |
| 25 | 52.2 | 33 | 149 | | | | | | | 25 |
| 26 | 51.8 | 30 S | 134 | | | | | | | 26 |
| 27 | 51.4 | 28 | 129 | | | | | | | 27 |
| 28 | 51.3 | 28 | 129 | | | | | | | 28 |
| 29 | 50.5 | 30 | 131 | | | | | | | 29 |
| 30 | 48.7 | 28 | 118 | | | | | | | 30 |
| 31 | | | | | | | | | | 31 |
| TOTAL | 1 645.7 | | 5 813 | | | | | | | TOTAL |

S - SAMPLE(S) COLLECTED THIS DAY

LESSER SLAVE RIVER AT HIGHWAY NO. 2A - STATION NO. 07BK005

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 21 | 15:40 | 4.0 | 42.3 | 27 | C | 26.0 | | | | | | | | | | | | 158 | | | | DH59 |
| MAR 22 | 11:00 | 2.5 | 42.8 | 16 | | 26.0 | | | | | | | | | | | | 152 | | | | DH59 |
| MAR 26 | 14:45 | 4.4 | 42.9 | 25 | | 26.0 | | | | | | | | | | | | 149 | | | | DH59 |
| MAR 28 | 07:20 | 2.1 | 42.5 | 21 | | 26.0 | | | | | | | | | | | | 141 | | | | DH59 |
| APR 2 | 07:20 | 3.5 | 42.5 | 25 | C | 26.0 | | | | | | | | | | | | 133 | | | | DH59 |
| APR 3 | 17:00 | 5.5 | 44.2 | 22 | | 26.0 | | | | | | | | | | | | 137 | | | | DH59 |
| APR 5 | 07:30 | 1.5 | 43.0 | 25 | | 26.0 | | | | | | | | | | | | 150 | | | | DH59 |
| APR 8 | 14:30 | 6.0 | 43.9 | 25 | | 26.0 | | | | | | | | | | | | 143 | | | | DH59 |
| APR 9 | 07:10 | 3.7 | 43.9 | 26 | | 26.0 | | | | | | | | | | | | 150 | | | | DH59 |
| APR 11 | 07:20 | 4.0 | 44.2 | 24 | | 26.0 | | | | | | | | | | | | 143 | | | | DH59 |
| APR 13 | 07:15 | 4.5 | 44.3 | 26 | | 26.0 | | | | | | | | | | | | 147 | | | | DH59 |
| APR 16 | 07:20 | 5.7 | 45.1 | 40 | | 26.0 | | | | | | | | | | | | 133 | | | | DH59 |
| APR 18 | 07:25 | 3.7 | 46.2 | 28 | | 26.0 | | | | | | | | | | | | 137 | | | | DH59 |
| APR 20 | 07:20 | 2.4 | 45.9 | 37 | | 26.0 | | | | | | | | | | | | 100 | | | | DH59 |
| APR 23 | 07:25 | 1.5 | 43.9 | 35 | | 26.0 | | | | | | | | | | | | 103 | | | | DH59 |
| APR 25 | 07:25 | 2.4 | 44.3 | 22 | | 26.0 | | | | | | | | | | | | 110 | | | | DH59 |
| APR 27 | 07:15 | 3.0 | 45.4 | 22 | | 26.0 | | | | | | | | | | | | 113 | | | | DH59 |
| APR 30 | 18:50 | 5.0 | 43.9 | 24 | | 26.0 | | | | | | | | | | | | 100 | | | | DH59 |
| MAY 3 | 14:40 | 7.0 | 45.1 | 33 | | 26.0 | | | | | | | | | | | | 122 | | | | DH59 |
| MAY 4 | 14:45 | 8.3 | 45.3 | 47 | | 26.0 | | | | | | | | | | | | 115 | | | | DH59 |
| MAY 7 | 19:00 | 8.7 | 42.8 | 42 | | 26.0 | | | | | | | | | | | | 115 | | | | DH59 |
| MAY 8 | 14:45 | 8.0 | 38.6 | 31 | | 26.0 | | | | | | | | | | | | 126 | | | | DH59 |
| MAY 11 | 14:45 | 8.1 | 42.3 | 59 | | 26.0 | | | | | | | | | | | | 122 | | | | DH59 |
| MAY 14 | 14:50 | 12.5 | 37.2 | 31 | | 26.0 | | | | | | | | | | | | 133 | | | | DH59 |
| MAY 17 | 14:40 | 8.5 | 47.5 | 141 | | 26.0 | | | | | | | | | | | | 138 | | | | DH59 |
| MAY 18 | 19:45 | 10.5 | 46.1 | 99 | | 26.0 | | | | | | | | | | | | 135 | | | | DH59 |
| MAY 22 | 08:15 | 8.5 | 54.1 | 113 | | 26.0 | | | | | | | | | | | | 117 | | | | DH59 |
| MAY 23 | 08:20 | 10.0 | 53.2 | 90 | | 26.0 | | | | | | | | | | | | 135 | | | | DH59 |
| MAY 25 | 08:20 | 8.0 | 58.8 | 72 | | 26.0 | | | | | | | | | | | | 127 | | | | DH59 |
| MAY 28 | 08:15 | 8.7 | 58.4 | 72 | | 26.0 | | | | | | | | | | | | 120 | | | | DH59 |
| MAY 30 | 08:15 | 11.5 | 57.0 | 83 | | 26.0 | | | | | | | | | | | | 120 | | | | DH59 |
| JUN 1 | 08:10 | 10.5 | 61.7 | 61 | | 26.0 | | | | | | | | | | | | 120 | | | | DH59 |
| JUN 4 | 09:25 | 13.0 | 74.1 | 90 | | 26.0 | | | | | | | | | | | | 126 | | | | DH59 |
| JUN 7 | 08:20 | 12.0 | 75.1 | 153 | C | 26.0 | | | | | | | | | | | | 118 | | | | DH59 |
| JUN 8 | 08:15 | 11.4 | 92.1 | 523 | | 26.0 | 21 | 25 | 44 | 58 | 80 | 91 | 95 | 99 | 100 | | | 116 | 5 | 65 | 26 | DH59 |
| JUN 13 | 08:30 | 15.7 | 74.7 | 81 | C | 26.0 | | | | | | | | | | | | 136 | | | | DH59 |
| JUN 15 | 08:30 | 15.2 | 72.7 | 280 | C | 26.0 | | | | | | | | | | | | 140 | | | | DH59 |
| JUN 18 | 08:15 | 13.0 | 88.3 | 102 | | 26.0 | | | | | | | | | | | | 140 | | | | DH59 |
| JUN 20 | 08:20 | 12.7 | 86.5 | 99 | | 26.0 | | | | | | | | | | | | 132 | | | | DH59 |
| JUN 22 | 08:15 | 15.5 | 85.5 | 77 | | 26.0 | | | | | | | | | | | | 148 | | | | DH59 |
| JUN 25 | 08:10 | 16.5 | 85.4 | 92 | | 26.0 | | | | | | | | | | | | 141 | | | | DH59 |
| JUN 26 | 18:20 | 16.5 | 83.5 | 56 | C | 26.0 | | | | | | | | | | | | 148 | | | | DH59 |
| JUN 27 | 08:20 | 15.5 | 84.1 | 78 | | 26.0 | | | | | | | | | | | | 131 | | | | DH59 |
| JUL 3 | 08:30 | 14.0 | 85.5 | 121 | C | 26.0 | | | | | | | | | | | | 128 | | | | DH59 |
| JUL 4 | 08:15 | 14.5 | 82.1 | 78 | C | 26.0 | | | | | | | | | | | | 131 | | | | DH59 |
| JUL 5 | 08:15 | 15.5 | 80.6 | 64 | C | 26.0 | | | | | | | | | | | | 138 | | | | DH59 |
| JUL 6 | 08:15 | 14.5 | 82.5 | 83 | | 26.0 | | | | | | | | | | | | 148 | | | | DH59 |
| JUL 8 | 08:20 | 14.0 | 80.5 | 109 | | 26.0 | | | | | | | | | | | | 130 | | | | DH59 |
| JUL 10 | 08:10 | 15.5 | 80.5 | 76 | | 26.0 | | | | | | | | | | | | 127 | | | | DH59 |
| JUL 11 | 08:15 | 15.0 | 75.5 | 82 | | 26.0 | | | | | | | | | | | | 130 | | | | DH59 |
| JUL 12 | 08:20 | 17.0 | 71.5 | 85 | | 26.0 | | | | | | | | | | | | 136 | | | | DH59 |
| JUL 13 | 08:20 | 16.5 | 71.5 | 87 | | 26.0 | | | | | | | | | | | | 135 | | | | DH59 |
| JUL 15 | 08:20 | 16.5 | 70.1 | 104 | | 26.0 | | | | | | | | | | | | 135 | | | | DH59 |
| JUL 17 | 08:20 | 17.5 | 67.3 | 76 | | 26.0 | | | | | | | | | | | | 147 | | | | DH59 |
| JUL 18 | 08:20 | 15.0 | 67.1 | 87 | | 26.0 | | | | | | | | | | | | 141 | | | | DH59 |
| JUL 19 | 08:15 | 15.0 | 65.0 | 73 | | 26.0 | | | | | | | | | | | | 131 | | | | DH59 |
| JUL 20 | 08:20 | 16.0 | 65.4 | 88 | | 26.0 | | | | | | | | | | | | 138 | | | | DH59 |
| JUL 22 | 08:20 | 16.0 | 64.1 | 65 | | 26.0 | | | | | | | | | | | | 131 | | | | DH59 |
| JUL 24 | 08:10 | 16.0 | 62.2 | 75 | | 26.0 | | | | | | | | | | | | 137 | | | | DH59 |
| JUL 25 | 08:15 | 18.0 | 62.4 | 89 | | 26.0 | | | | | | | | | | | | 134 | | | | DH59 |
| JUL 26 | 08:15 | 19.5 | 61.2 | 103 | | 26.0 | | | | | | | | | | | | 138 | | | | DH59 |
| JUL 26 | 18:35 | 20.0 | 60.7 | 58 | | 26.0 | | | | | | | | | | | | 134 | | | | DH59 |
| JUL 27 | 08:30 | 18.0 | 59.3 | 83 | | 26.0 | | | | | | | | | | | | 135 | | | | DH59 |
| AUG 4 | 20:15 | 22.5 | 50.1 | 124 | | 26.0 | | | | | | | | | | | | 140 | | | | DH59 |
| AUG 5 | 21:20 | 21.0 | 50.0 | 73 | | 26.0 | | | | | | | | | | | | 137 | | | | DH59 |
| AUG 7 | 08:15 | 19.0 | 51.1 | 101 | | 26.0 | | | | | | | | | | | | 136 | | | | DH59 |
| AUG 8 | 08:20 | 17.5 | 53.4 | 111 | | 26.0 | | | | | | | | | | | | 140 | | | | DH59 |
| AUG 9 | 08:40 | 17.5 | 57.2 | 53 | | 26.0 | | | | | | | | | | | | 141 | | | | DH59 |
| AUG 11 | 19:30 | 21.5 | 57.1 | 49 | | 26.0 | | | | | | | | | | | | 136 | | | | DH59 |
| AUG 13 | 08:20 | 18.5 | 57.9 | 82 | | 26.0 | | | | | | | | | | | | 132 | | | | DH59 |
| AUG 14 | 08:15 | 18.5 | 59.2 | 85 | | 26.0 | | | | | | | | | | | | 136 | | | | DH59 |
| AUG 15 | 08:10 | 18.0 | 58.7 | 54 | | 26.0 | | | | | | | | | | | | 138 | | | | DH59 |
| AUG 16 | 08:20 | 18.0 | 58.0 | 48 | | 26.0 | | | | | | | | | | | | 140 | | | | DH59 |
| AUG 17 | 08:15 | 17.0 | 57.2 | 41 | | 26.0 | | | | | | | | | | | | 138 | | | | DH59 |
| AUG 20 | 08:20 | 15.5 | 60.3 | 85 | | 26.0 | | | | | | | | | | | | 136 | | | | DH59 |
| AUG 21 | 08:20 | 13.0 | 58.2 | 62 | | 26.0 | | | | | | | | | | | | 138 | | | | DH59 |
| AUG 22 | 08:15 | 14.0 | 56.1 | 46 | | 26.0 | | | | | | | | | | | | 138 | | | | DH59 |
| AUG 30 | 08:30 | 8.5 | 57.3 | 61 | | 26.0 | | | | | | | | | | | | 146 | | | | DH59 |
| SEP 4 | 08:15 | 9.5 | 46.6 | 31 | | 26.0 | | | | | | | | | | | | 140 | | | | DH59 |
| SEP 5 | 08:15 | 12.0 | 48.5 | 31 | | 26.0 | | | | | | | | | | | | 143 | | | | DH59 |
| SEP 6 | 08:20 | 12.5 | 50.0 | 38 | | 26.0 | | | | | | | | | | | | 136 | | | | DH59 |
| SEP 7 | 08:30 | 10.5 | 56.6 | 74 | | 26.0 | | | | | | | | | | | | 147 | | | | DH59 |
| SEP 10 | 08:20 | 8.0 | 62.2 | 87 | | 26.0 | | | | | | | | | | | | 144 | | | | DH59 |
| SEP 11 | 08:15 | 7.0 | 59.3 | 84 | | 26.0 | | | | | | | | | | | | 143 | | | | DH59 |
| SEP 12 | 08:15 | 8.0 | 58.1 | 53 | | 26.0 | | | | | | | | | | | | 144 | | | | DH59 |
| SEP 13 | 08:20 | 8.5 | 58.0 | 52 | | 26.0 | | | | | | | | | | | | 138 | | | | DH59 |
| SEP 14 | 08:15 | 9.0 | 57.2 | 42 | | 26.0 | | | | | | | | | | | | 153 | | | | DH59 |
| SEP 28 | 16:00 | 8.0 | 50.4 | 30 | | 26.0 | | | | | | | | | | | | 130 | | | | DH59 |
| OCT 17 | 16:15 | 3.5 | 51.8 | 71 | | 26.0 | | | | | | | | | | | | 142 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT 26.0 METRES

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

LESSER SLAVE RIVER AT HIGHWAY NO. 2A - STATION NO. 07BK005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : APR-OCT MEAN LOAD (TONNES) | SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : APR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1977 | APR-OCT # | M-MS | 188 | APR 12 | 31 | JUL 19 | --- | | --- | | --- | --- | --- |
| 1978 | JUN-SEP # | M-MS | 70 | JUL 05 | 39 | SEP 05 | --- | | --- | | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 77 | APR 15 | 18 | OCT 28 | --- | | --- | | --- | --- | --- |
| 1981 | MAR-OCT | M-S | 111 | JUL 06 | 15 | SEP 30 | 629 | JUL 06 | 34 300 | | 180 | 180 | --- |
| 1982 | JUN-AUG # | M-MS | 39 | AUG 06 | 23 | AUG 31 | --- | | --- | | --- | --- | --- |
| 1983 | APR-OCT | M-S | 284 | JUN 25 | 14 | MAY 06 * | 4 070 | JUN 25 * | 88 800 | * | --- | --- | --- |
| 1984 | MAR-OCT | M-S | 523 | JUN 8 * | 18 | MAR 22 | 4 030 | JUN 06 | 72 500 | | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

LESSER SLAVE RIVER AT SLAVE LAKE - STATION NO. 07BK001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1978 | OCT-OCT | M-MS | 132 | OCT 11 * | 132 | OCT 11 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

LETHBRIDGE NORTHERN IRRIGATION DISTRICT CANAL AT MENZIESIES BRIDGE - STATION NO. 05AB018

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1977 | APR-MAY # | M-MS | 157 | MAY 12 * | 52 | APR 13 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

LITTLE PADDLE RIVER NEAR MAYERTHORPE - STATION NO. 07BB005

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JUN 09 | 11:30 | 10.0 | 11.1 | 512 | 2.0 | 27 | 44 | 63 | 81 | 90 | 95 | 98 | 100 | | | | 200 | 5 | 51 | 44 | --- |

NOTE : SINGLE VERTICAL LOCATED AT 2.0 METRES

LITTLE PADDLE RIVER NEAR MAYERTHORPE - STATION NO. 07BB005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | JUL-OCT # | M-MS | 94 JUL 14 | | 11 SEP 25 | | --- | --- | --- | --- | --- |
| 1975 | APR-SEP # | M-MS | 154 APR 30 | | 11 JUN 17 | | --- | --- | --- | --- | --- |
| 1976 | APR-AUG # | M-MS | 350 APR 13 | | 6 AUG 10 | * | --- | --- | --- | --- | --- |
| 1977 | APR-SEP # | M-MS | 434 MAY 30 | | 14 JUN 22 | | --- | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 1 080 JUN 15 | * | 17 OCT 30 | | --- | --- | --- | --- | --- |
| 1979 | APR-OCT # | M-MS | 595 APR 30 | | 13 AUG 20 | | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 705 APR 15 | | 21 OCT 14 | | --- | --- | --- | --- | --- |
| 1981 | MAY-OCT # | M-MS | 38 MAY 18 | | 10 JUL 08 | | --- | --- | --- | --- | --- |
| 1982 | JUL-OCT # | M-MS | 513 JUL 05 | | 19 AUG 31 | | --- | --- | --- | --- | --- |
| 1983 | JUN-JUN | M-MS | 185 JUN 28 | | 185 JUN 28 | | --- | --- | --- | --- | --- |
| 1984 | JUN-JUN | M-MS | 512 JUN 09 | | 512 JUN 09 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

LITTLE RED DEER RIVER NEAR WATER VALLEY - STATION NO. 05CB002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-JUN # | M-MS | 40 APR 28 | * | 3 MAY 25 | * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

LOVETT RIVER NEAR THE MOUTH - STATION NO. 07BA003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-OCT # | M-MS | 203 JUN 18 | | 8 SEP 08 | | --- | --- | --- | --- | --- |
| 1977 | APR-SEP # | M-MS | 124 MAY 09 | | 18 JUL 12 | | --- | --- | --- | --- | --- |
| 1978 | MAY-NOV # | M-MS | 18 JUN 21 | | 4 SEP 27 | | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 39 MAY 22 | | 3 AUG 15 | * | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 326 JUN 24 | | 8 OCT 28 | | --- | --- | --- | --- | --- |
| 1982 | MAY-OCT # | M-MS | 980 JUL 06 | * | 9 SEP 21 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

MACKAY RIVER NEAR FORT MACKAY - STATION NO. 07DB001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 24 | 11:45 | 11.0 | 23.8 | 57 | 18.0 | | | | | | | | | | | | 198 | | | | D49 |
| AUG 10 | 12:05 | 22.0 | 35.8 | 8 | 15.0 | | | | | | | | | | | | 215 | | | | DH48 |
| SEP 22 | 11:00 | 8.0 | 5.17 | 5 | 17.0 | | | | | | | | | | | | 216 | | | | DH48 |
| SEP 22 | 11:01 | 8.0 | 5.17 | 5 | 17.0 | | | | | | | | | | | | 224 | | | | DH48 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

MACKAY RIVER NEAR FORT MACKAY - STATION NO. 07DB001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | JUN-OCT # | M-MS | 353 JUL 20 | | 27 OCT 08 | | --- | --- | --- | --- | --- |
| 1976 | APR-NOV # | M-MS | 698 APR 10 | | 7 AUG 06 | | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 157 APR 21 | | 4 AUG 22 | | --- | --- | --- | --- | --- |
| 1978 | MAY-OCT # | M-MS | 714 MAY 02 | * | 4 AUG 22 | | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 38 SEP 19 | | 5 MAY 22 | | --- | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 13 MAY 28 | | 1 AUG 28 | * | --- | --- | --- | --- | --- |
| 1982 | MAY-SEP # | M-MS | 92 MAY 24 | | 2 SEP 15 | | --- | --- | --- | --- | --- |
| 1983 | APR-SEP # | M-MS | 108 APR 25 | | 3 SEP 17 | | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 57 MAY 24 | | 5 SEP 22 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

MAHAWI LAKE CHANNEL AT DOG CAMP - STATION NO. 07KF010

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | JUN-OCT # | M-MS | 2 810 JUL 21 | * | 20 OCT 12 | | --- | --- | --- | --- | --- |
| 1973 | MAY-JUL # | M-MS | 920 JUL 20 | | 9 AUG 21 | * | --- | --- | --- | --- | --- |
| 1974 | MAY-MAY | M-MS | 321 MAY 22 | | 321 MAY 22 | | --- | --- | --- | --- | --- |
| 1976 | MAY-OCT # | M-MS | 1 680 JUL 09 | | 25 AUG 03 | | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 1 330 JUN 15 | | 15 AUG 08 | | --- | --- | --- | --- | --- |
| 1979 | JUN-SEP # | M-MS | 145 JUN 21 | | 18 AUG 18 | | --- | --- | --- | --- | --- |
| 1980 | JUN-OCT # | M-MS | 371 JUN 18 | | 13 JUL 14 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

MAMAWI LAKE CHANNEL AT OLD DOG CAMP - STATION NO. 07KF003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | JUN-OCT # | M-MS | 981 | SEP 08 * | 110 | JUL 15 | --- | --- | --- | --- | --- |
| 1978 | JUN-OCT # | M-MS | 323 | JUL 11 | 22 | AUG 21 | --- | --- | --- | --- | --- |
| 1981 | JUN-OCT # | M-MS | 188 | JUL 10 | 16 | JUL 24 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

MARMOT CREEK MAIN STEM NEAR SEEBE - STATION NO. 05BF015

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1963 | MAY-DEC | M-S | 120 | NOV 26 | 1 | MAY 28 | 12.4 | JUN 30 | 42.5 | --- | --- | --- |
| 1964 | JAN-DEC | M-C | 270 | JUN 08 * | 0 | SEP 22 * | 45.5 | JUN 08 * | 132 * | 0.51 | 0.51 | --- |
| 1965 | JAN-DEC | M-C | 85 | MAR 11 | 0 | MAY 24 | 5.73 | JUN 18 | 37.7 | 0.13 | 0.32 | 59.4 |
| 1966 | JAN-DEC | M-C | 25 | MAY 09 | 1 | JUL 25 | 0.81 | MAY 09 | 18.8 | 0.06 | 0.23 | 80.8 |
| 1967 | JAN-DEC | M-C | 25 | MAY 30 | 0 | APR 10 | 1.58 | MAY 30 | 12.5 | 0.05 | 0.18 | 57.4 |
| 1968 | JAN-DEC | M-C | 8 | JUN 11 | 0 | JUL 30 | 0.48 | JUN 11 | 9.38 | 0.04 | 0.15 | 55.9 |
| 1969 | JAN-DEC | M-C | 17 | JUN 25 | 0 | FEB 10 | 3.57 | JUN 25 | 27.4 | 0.11 | 0.15 | 45.0 |
| 1970 | JAN-DEC | M-C | 23 | JAN 20 | 0 | APR 13 | 1.77 | JUN 15 | 14.2 | 0.06 | 0.14 | 45.3 |
| 1971 | JAN-DEC | M-C | 98 | JUN 05 | 0 | JUN 18 | 18.5 | JUN 05 | 59.3 | 0.25 | 0.15 | 37.4 |
| 1972 | JAN-DEC | B-C | 28 | JUN 10 | 0 | FEB 14 | 3.51 | JUN 10 | 22.7 | 0.10 | 0.15 | 33.6 |
| 1973 | JAN-DEC | B-C | 17 | JUN 07 | 0 | NOV 08 | 1.45 | JUN 07 | 15.1 | 0.07 | 0.14 | 32.6 |
| 1974 | JAN-DEC | B-C | 44 | JUN 17 | 1 | FEB 20 | 7.41 | JUN 17 | 34.1 | 0.14 | 0.14 | 29.5 |
| 1975 | JAN-DEC | B-C | 5 | JUN 04 | 0 | JAN 06 | 0.23 | JUN 02 | 5.78 | 0.03 | 0.13 | 28.8 |
| 1976 | JAN-DEC | B-C | 7 | JUL 01 | 0 | FEB 18 | 0.33 | JUL 01 | 5.85 | 0.03 | 0.12 | 30.4 |
| 1977 | JAN-DEC | B-C | 12 | JUN 01 | 0 | JAN 19 | 0.39 | JUN 01 | 5.85 | 0.03 | 0.12 | 28.7 |
| 1978 | JAN-DEC | B-C | 23 | JUN 08 | 0 | MAY 31 | 2.03 | JUN 08 | 13.9 | 0.08 | 0.11 | 29.3 |
| 1979 | JAN-NOV # | B-S | 5 | MAY 10 | 0 | JAN 17 | 0.64 | MAY 26 | 2.79 | 0.02 | 0.11 | 27.9 |
| 1980 | MAR-OCT | M-S | 12 | SEP 17 | 0 | APR 08 | 0.69 | JUN 11 | 13.8 | 0.06 | 0.10 | 28.9 |
| 1981 | APR-OCT | M-S | 36 | MAY 17 | 1 | JUN 23 | 2.06 | MAY 26 | 20.1 | --- | --- | --- |
| 1982 | APR-OCT | M-S | 22 | JUN 15 | 0 | JUN 08 | 1.87 | JUN 15 | 9.58 | --- | --- | --- |
| 1983 | MAY-SEP | M-S | 3 | JUL 12 | 0 | AUG 19 | 0.11 | MAY 29 | 2.02 | --- | --- | --- |

B - BOTH AUTOMATIC AND MANUAL SAMPLING M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

MCLEOD RIVER ABOVE EMBARRAS RIVER - STATION NO. 07AF002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 24 | 15:00 | 2.0 | 23.5 | | 13 | MID | | | | | | | | | | | | 148 | | | | DH48 |
| MAY 08 | 17:10 | 9.0 | 19.5 | H | 12 | MID | | | | | | | | | | | | 159 | | | | DH48 |
| MAY 29 | 13:15 | 12.0 | 26.7 | | 8 | MID | | | | | | | | | | | | 151 | | | | DH48 |
| JUN 25 | 17:30 | 17.0 | 36.2 | | 19 | MID | | | | | | | | | | | | 156 | | | | DH48 |
| JUL 17 | 08:40 | 17.0 | 12.4 | | 7 | MID | | | | | | | | | | | | 195 | | | | DH48 |
| AUG 21 | 13:40 | 15.0 | 5.28 | H | 5 | MID | | | | | | | | | | | | 205 | | | | DIP |
| SEP 17 | 17:20 | 9.0 | 22.4 | H | 7 | MID | | | | | | | | | | | | 181 | | | | DH48 |
| SEP 24 | 15:40 | 4.0 | 48.7 | | 38 | MID | | | | | | | | | | | | 167 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): H - DAILY MEAN

MCLEOD RIVER ABOVE EMBARRAS RIVER - STATION NO. 07AF002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-SEP # | M-MS | 19 | AUG 25 | 3 | SEP 22 | --- | --- | --- | --- | --- |
| 1977 | JUN-AUG # | M-MS | 30 | JUN 22 | 7 | JUL 20 | --- | --- | --- | --- | --- |
| 1978 | MAY-AUG # | M-MS | 108 | JUN 05 | 3 | AUG 23 | --- | --- | --- | --- | --- |
| 1979 | MAY-SEP # | M-MS | 85 | MAY 16 | 0 | AUG 15 * | --- | --- | --- | --- | --- |
| 1980 | APR-AUG # | M-MS | 893 | JUN 03 * | 11 | MAY 05 | --- | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 113 | MAY 11 | 3 | JUL 08 | --- | --- | --- | --- | --- |
| 1982 | MAY-OCT # | M-MS | 200 | MAY 04 | 5 | OCT 27 | --- | --- | --- | --- | --- |
| 1983 | MAY-OCT # | M-MS | 28 | MAY 10 | 1 | SEP 20 | --- | --- | --- | --- | --- |
| 1984 | APR-SEP | M-MS | 38 | SEP 24 | 5 | AUG 21 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

MCLEOD RIVER NEAR WHITECOURT - STATION NO. 07AG004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 02 | 18:00 | 5.0 | 43.5 | 300 | 38.0 | | | | | | | | | | | | 178 | | | | DH59 |
| JUL 24 | 18:00 | 23.0 | 16.7 | 54 | MID | | | | | | | | | | | | 212 | | | | --- |

NOTE : SINGLE VERTICAL IS UNDETERMINED

MCLEOD RIVER NEAR WHITECOURT - STATION NO. 07AG004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-SEP # | M-MS | 27 | APR 21 | 3 | SEP 22 | 150 APR 21 * | --- | --- | --- | --- |
| 1977 | APR-SEP # | M-MS | 1 240 | MAY 31 | 12 | APR 30 | --- | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 878 | JUN 18 | 3 | AUG 29 | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 287 | MAY 01 | 0 | AUG 22 * | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 1 850 | JUN 07 * | 5 | OCT 15 | --- | --- | --- | --- | --- |
| 1981 | APR-OCT # | M-MS | 32 | MAY 18 | 3 | SEP 08 | --- | --- | --- | --- | --- |
| 1982 | JUN-SEP # | M-MS | 1 470 | JUL 07 | 5 | JUN 23 | --- | --- | --- | --- | --- |
| 1983 | JUN-SEP # | M-MS | 115 | JUL 05 | 2 | AUG 31 | --- | --- | --- | --- | --- |
| 1984 | MAY-JUL | M-MS | 300 | MAY 02 | 54 | JUL 24 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

MEADOW CREEK NEAR THE MOUTH - STATION NO. 05AB020

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-JUN # | M-MS | 5 110 | JUN 10 * | 78 | MAY 05 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## MICHICHI CREEK AT DRUMHELLER - STATION NO. 05CE026

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1978 | JUN-JUN | M-MS | 11 800 | JUN 07 * | 11 800 | JUN 07 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

## MIDDLE FORK CREEK IN CIRQUE NEAR SEEBE - STATION NO. 05BF020

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1978 | AUG-AUG | M-MS | 3 | AUG 28 | 3 | AUG 28 | --- | --- | --- | --- | --- |
| 1979 | JUN-SEP # | M-MS | 6 | AUG 30 * | 1 | JUL 06 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

## MIDDLE FORK CREEK NEAR SEEBE - STATION NO. 05BF017

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1969 | JAN-DEC | M-C | 31 | APR 08 | 0 | APR 29 * | 0.55 | MAY 25 | 5.58 | | 0.03 | 0.03 | --- |
| 1970 | JAN-DEC | M-C | 33 | JUN 04 | 0 | FEB 02 | 0.75 | JUN 17 | 7.05 | | 0.03 | 0.03 | 0.0 |
| 1971 | JAN-DEC | M-C | 12 | JUN 07 | 0 | AUG 04 | 0.35 | JUN 08 | 4.53 | | 0.02 | 0.03 | 13.5 |
| 1972 | JAN-DEC | M-C | 33 | JUN 01 | 0 | JUL 10 | 1.37 | JUN 01 | 9.31 | | 0.04 | 0.03 | 13.8 |
| 1973 | JAN-DEC | M-C | 17 | JUN 22 | 0 | FEB 20 | 0.51 | JUN 23 | 4.51 | | 0.02 | 0.03 | 12.9 |
| 1974 | JAN-DEC | M-C | 80 | JUN 17 * | 0 | DEC 10 | 5.40 | JUN 17 * | 31.1 | * | --- | --- | --- |
| 1975 | JAN-DEC # | M-S | 5 | JUN 23 | 0 | JAN 06 | 0.11 | JUN 24 | 0.48 | | --- | --- | --- |
| 1976 | JAN-DEC | M-C | 5 | JUN 16 | 0 | JUN 02 | 0.10 | JUN 20 | 2.36 | | 0.01 | 0.03 | 16.1 |
| 1977 | JAN-DEC | M-C | 4 | JUN 01 | 0 | APR 28 | 0.08 | AUG 14 | 0.12 | | 0 | 0.02 | 25.8 |
| 1978 | APR-DEC | M-S | 30 | JUN 09 | 0 | MAY 11 | 1.05 | JUN 08 | 7.61 | | --- | --- | --- |
| 1979 | JAN-NOV # | M-S | 8 | JUN 04 | 0 | JAN 17 | 0.52 | MAY 25 | 1.87 | | 0.01 | 0.02 | 23.1 |
| 1980 | MAR-OCT | M-S | 27 | SEP 17 | 0 | APR 09 | 0.53 | JUN 11 | 4.44 | | 0.02 | 0.02 | 20.4 |
| 1981 | APR-OCT | M-S | 29 | MAY 26 | 1 | MAY 17 | 1.33 | MAY 26 | 9.33 | | --- | --- | --- |
| 1982 | MAY-SEP | M-S | 34 | JUN 13 | 0 | JUL 27 | 1.46 | JUN 13 | 5.21 | | --- | --- | --- |
| 1983 | MAY-SEP | M-S | 6 | MAY 26 | 1 | MAY 30 | 0.09 | MAY 29 | 0.95 | | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION

S - SEASONAL OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

ALBERTA

MIDDLE FORK CREEK NEAR SEEBE - STATION NO. 05BF017

MONTHLY AND ANNUAL TOTAL VOLUMETRIC BED LOAD IN CUBIC METRES

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL | YEAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1964 | 0 | 0 | 0 | 0 | 0 | 18.8 | 0 | 0 | 0 | 0 | 0 | 0 | 18.8 | 1964 |
| 1965 | 0 | 0 | 0 | 0 | 0 | 2.7 | 2.0 | 0 | 0 | 0 | 0 | 0 | 4.7 | 1965 |
| 1966 | 0 | 0 | 0 | 0 | 0.8 | 2.3 | 0.6 | 0 | 0 | 0 | 0 | 0 | 3.7 | 1966 |
| 1967 | 0 | 0 | 0 | 0 | 1.0 | 4.6 | 1.8 | 0 | 0 | 0 | 0 | 0 | 7.4 | 1967 |
| 1968 | 0 | 0 | 0 | 0 | 0.5 | 1.5 | 0.8 | 0.4 | 0.3 | 0.2 | 0 | 0 | 3.7 | 1968 |
| 1969 | 0 | 0 | 0 | 1.2 | 1.4 | 3.4 | 2.3 | 0.6 | 0.7 | 0 | 0 | 0 | 9.6 | 1969 |
| 1970 | 0 | 0 | 0 | 0 | 1.7 | 6.3 | 2.0 | 0 | 0 | 0 | 0 | 0 | 10.0 | 1970 |
| 1971 | 0 | 0 | 0 | 0 | 2.1 | 5.1 | 1.6 | 0 | 0 | 0 | 0 | 0 | 8.8 | 1971 |
| 1972 | 0 | 0 | 0 | 0 | 1.0 | 3.8 | 1.5 | 0 | 0 | 0 | 0 | 0 | 6.1 | 1972 |
| 1973 | 0 | 0 | 0 | 0 | 0 | 2.1 | 0 | 0 | 0 | 0 | 0 | 0 | 2.1 | 1973 |
| 1974 | 0 | 0 | 0 | 0 | 0 | 8.0 | 4.0 | 0 | 0 | 0 | 0 | 0 | 12.0 | 1974 |
| 1975 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 1975 |
| 1976 | 0 | 0 | 0 | 0 | 1.5 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 2.4 | 1976 |
| 1977 | --- | --- | --- | --- | 0.2 | 0.8 | 0 | 0 | 0 | 0 | --- | --- | --- | 1977 |
| 1978 | --- | --- | --- | 0 | 0.7 | 3.4 | 1.3 | 0.2 | 0 | 0 | 0 | 0 | --- | 1978 |
| MEAN | 0 | 0 | 0 | 0.1 | 0.7 | 4.4 | 1.2 | 0.1 | 0.1 | 0 | 0 | 0 | 7.0 | MEAN |

BED LOAD MEASURED BY VOLUMETRIC METHOD. MONTHLY DISTRIBUTION ESTIMATED.

MIDDLE STREETER CREEK NEAR NANTON - STATION NO. 05AB023

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1965 | JUN-DEC | M-S | 29 | JUL 06 | 0 | JUN 24 * | 0.06 | JUN 19 | --- | --- | --- | --- |
| 1966 | JAN-DEC | M-C | 36 | JUN 22 | 0 | JUN 29 | 0.18 | JUN 06 | --- | 0 | 0.00 | --- |
| 1967 | JAN-SEP | M-S | 30 | JUN 01 * | 22 | MAY 24 | 0.28 | JUN 02 * | 1.11 * | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION

S - SEASONAL OPERATION

* - EXTREME FOR PERIOD OF RECORD

MIDDLE STREETER CREEK NEAR NANTON - STATION NO. 05AB023

MONTHLY AND ANNUAL TOTAL VOLUMETRIC BED LOAD IN CUBIC METRES

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL | YEAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1965 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1965 |
| 1966 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1966 |
| 1967 | 0 | 0 | 0 | 0 | 0.2 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1967 |
| MEAN | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | MEAN |

BED LOAD MEASURED BY VOLUMETRIC METHOD. MONTHLY DISTRIBUTION ESTIMATED.

MILK RIVER AT EASTERN CROSSING OF INTERNATIONAL BOUNDARY - STATION NO. 11AA031

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAY-SEP MEAN LOAD (TONNES) | SUMMARY : MAY-SEP HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAY-SEP STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | APR-SEP # | M-MS | 6 480 | MAY 15 | 889 | MAY 30 | --- | | --- | --- | --- | --- |
| 1975 | APR-SEP | M-S | 12 200 | JUN 23 * | 402 | JUN 17 | 174 000 | JUN 23 * | 1 730 000 * | 8 810 | 9 610 | --- |
| 1976 | MAR-AUG # | M-MS | 2 860 | MAR 28 | 676 | APR 19 | --- | | --- | --- | --- | --- |
| 1981 | MAR-OCT | M-S | 7 480 | MAY 07 | 73 | OCT 08 | 28 700 | MAY 18 | 812 000 | 3 240 | 6 430 | 49.5 |
| 1982 | APR-OCT | M-S | 4 760 | MAY 30 | 12 | SEP 14 * | 31 400 | MAY 28 | 306 000 | 1 820 | 4 890 | 49.0 |

M - MANUAL SAMPLING

S - SEASONAL OPERATION

# - PERIOD OF RECORD INCOMPLETE

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

MILK RIVER AT HIGHWAY NO. 880 - STATION NO. 11AA038

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | SAMPLED CONCENTRATION MINIMUM (mg/L) | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|
| 1981 | AUG-AUG | M-MS | 198 AUG 28 * | 198 AUG 28 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

MILK RIVER AT MILK RIVER - STATION NO. 11AA005

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR | 13 07:50 | 0.0 | 4.16 | 14 | MID | | | | | | | | | | | | 178 | | | | DH48 |
| MAR | 28 09:30 | 0.0 | 15.3 | 289 | 46.0 X | | | | | | | | | | | | 114 | | | | DH59 |
| APR | 10 09:30 | 3.0 | 5.78 | 45 | MID | | | | | | | | | | | | 174 | | | | DH48 |
| APR | 24 11:20 | 4.0 | 7.37 | 54 | MID | | | | | | | | | | | | 217 | | | | DH48 |
| MAY | 30 07:35 | 14.0 | 17.8 | 434 | MID | | | | | | | | | | | | 84 | | | | DH48 |
| JUN | 25 15:30 | 21.0 | 19.5 | 403 | 32.0 X | | | | | | | | | | | | 89 | | | | DH59 |
| AUG | 27 15:35 | 15.0 | 2.18 | 30 | WERS X | | | | | | | | | | | | 139 | | | | DH48 |
| AUG | 27 15:30 | 15.0 | 2.16 | 19 | WERS X | | | | | | | | | | | | 136 | | | | DH48 |
| OCT | 31 17:15 | 0.0 | 0.177 | 5 | MID | | | | | | | | | | | | 471 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

MILK RIVER AT MILK RIVER - STATION NO. 11AA005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | SAMPLED CONCENTRATION MINIMUM (mg/L) | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|
| 1974 | MAY-OCT # | M-MS | 582 MAY 08 | 3 OCT 17 | --- | --- | --- | --- | --- |
| 1975 | FEB-OCT # | M-MS | 5 130 JUN 21 * | 6 APR 15 | --- | --- | --- | --- | --- |
| 1978 | MAR-OCT # | M-MS | 788 MAY 11 | 14 OCT 13 | --- | --- | --- | --- | --- |
| 1981 | MAR-NOV | M-S | 831 MAR 11 | 7 NOV 02 | 3 890 MAY 17 | 80 500 | 389 | 389 | --- |
| 1982 | MAR-NOV | M-S | 4 070 APR 14 | 3 SEP 08 * | 39 400 APR 14 * | 139 000 * | 525 | 468 | 17.5 |
| 1983 | MAR-OCT # | M-MS | 3 300 JUN 19 | 3 SEP 13 | --- | --- | --- | --- | --- |
| 1984 | MAR-OCT | M-MS | 434 MAY 30 | 5 OCT 31 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

## MILK RIVER AT WESTERN CROSSING OF INTERNATIONAL BOUNDARY - STATION NO. 11AA025

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | MAY-OCT # | M-MS | 88 | MAY 07 | 8 | OCT 17 | --- | --- | --- | --- | --- |
| 1975 | FEB-OCT # | M-MS | 5 230 | JUN 20 * | 7 | MAR 19 | --- | --- | --- | --- | --- |
| 1976 | MAR-OCT # | M-MS | 141 | APR 13 | 21 | OCT 13 | --- | --- | --- | --- | --- |
| 1981 | MAR-NOV # | M-MS | 1 010 | MAY 21 | 8 | APR 14 | --- | --- | --- | --- | --- |
| 1982 | MAR-NOV # | M-MS | 1 120 | APR 14 | 3 | JUN 21 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## MILK RIVER NEAR PENDANT D'OREILLE - STATION NO. 11AA035

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1981 | APR-NOV # | M-MS | 2 880 | JUN 17 * | 10 | NOV 03 | --- | --- | --- | --- | --- |
| 1982 | APR-NOV # | M-MS | 1 800 | JUN 03 | 5 | AUG 28 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## MILK RIVER NEAR WRITING-ON-STONE PARK - STATION NO. 11AA034

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1981 | APR-NOV # | M-MS | 1 210 | MAY 20 * | 15 | NOV 03 | --- | --- | --- | --- | --- |
| 1982 | APR-NOV # | M-MS | 723 | MAY 11 | 4 | SEP 08 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## MILL CREEK NEAR THE MOUTH - STATION NO. 05AA011

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1973 | MAR-JUN # | M-MS | 537 | JUN 01 * | 17 | MAR 24 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

MUSKEG RIVER NEAR FORT MACKAY - STATION NO. 07DA008

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 22 | 07:45 | 10.0 | 1.88 | 10 | 3.0 | | | | | | | | | | | | 242 | | | | DH48 |
| MAY 22 | 07:48 | 10.0 | 1.88 | 8 | 3.0 | | | | | | | | | | | | 233 | | | | DH48 |
| AUG 11 | 17:40 | 20.0 | 4.41 | 5 | 11.0 | | | | | | | | | | | | 256 | | | | DH48 |
| SEP 21 | 14:30 | 10.0 | 5.14 | 59 | WELB | | | | | | | | | | | | 226 | | | | DIP |
| SEP 21 | 14:31 | 10.0 | 5.14 | 11 | WELB | | | | | | | | | | | | 226 | | | | DIP |

NOTE : SINGLE VERTICAL IS UNDETERMINED

MUSKEG RIVER NEAR FORT MACKAY - STATION NO. 07DA008

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-NOV # | M-MS | 41 | APR 11 | 3 | AUG 03 * | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 28 | APR 20 | 3 | AUG 25 | --- | --- | --- | --- | --- |
| 1978 | APR-SEP # | M-MS | 15 | APR 24 | 3 | JUN 28 | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 13 | MAY 02 | 5 | MAY 30 | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 18 | APR 24 | 5 | OCT 28 | --- | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 8 | JUL 15 | 3 | MAY 27 | --- | --- | --- | --- | --- |
| 1982 | MAY-SEP # | M-MS | 8 | MAY 19 | 4 | JUN 28 | --- | --- | --- | --- | --- |
| 1983 | APR-SEP # | M-MS | 11 | APR 27 | 3 | AUG 07 | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 59 | SEP 21 * | 5 | AUG 11 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

NORTH FORK MILK RIVER ABOVE ST. MARY CANAL - STATION NO. 11AA032

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | MAY-OCT # | M-MS | 32 | JUN 11 | 2 | OCT 18 * | --- | --- | --- | --- | --- |
| 1975 | APR-OCT # | M-MS | 323 | JUN 20 * | 5 | SEP 17 | --- | --- | --- | --- | --- |
| 1976 | MAR-OCT # | M-MS | 69 | MAR 31 | 2 | OCT 14 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## NORTH MILK RIVER NEAR INTERNATIONAL BOUNDARY - STATION NO. 11AA001

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : APR-SEP MEAN LOAD (TONNES) | SUMMARY : APR-SEP HISTORICAL MEAN LOAD (TONNES) | SUMMARY : APR-SEP HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | MAY-OCT # | M-MS | 82 | MAY 07 | 10 | SEP 25 | --- | | --- | | --- | --- | --- |
| 1975 | FEB-SEP # | M-S | 1 450 | JUN 20 * | 8 | JUL 01 | 5 280 | JUN 30 * | 18 900 * | | 103 | 103 | --- |
| 1976 | MAR-OCT | M-S | 427 | MAY 07 | 10 | SEP 08 | 884 | MAY 08 | 17 300 | | 92.8 | 97.8 | 5.3 |
| 1981 | MAR-NOV | M-S | 159 | MAR 23 | 4 | OCT 15 | 284 | JUN 14 | 12 700 | | 80.8 | 82.1 | 19.5 |
| 1982 | MAR-NOV # | M-MS | 139 | MAY 19 | 2 | AUG 05 * | --- | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## NORTH SASKATCHEWAN RIVER AT EDMONTON - STATION NO. 05DF001

### INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 25 | 11:30 | 3.0 | 181 | 41 | 188 | | | | | | | | | | | | 207 | | | | DH59 |
| APR 25 | 11:31 | 3.0 | 181 | 37 | 188 | | | | | | | | | | | | 201 | | | | DH59 |
| MAY 24 | 10:00 | 11.0 | 120 | 17 | 188 | | | | | | | | | | | | 214 | | | | DH59 |
| MAY 24 | 10:01 | 11.0 | 120 | 17 | 188 | | | | | | | | | | | | 217 | | | | DH59 |
| JUN 13 | 11:29 | 17.0 | 286 | 251 | 188 | | | | | | | | | | | | 200 | | | | DH59 |
| JUN 13 | 11:30 | 17.0 | 286 | 236 | 188 | | | | | | | | | | | | 191 | | | | DH59 |
| JUL 05 | 09:59 | 19.0 | 272 | 61 | 188 | | | | | | | | | | | | 211 | | | | DH59 |
| JUL 05 | 10:00 | 19.0 | 272 | 55 | 188 | | | | | | | | | | | | 207 | | | | DH59 |
| AUG 01 | 08:59 | 22.0 | 157 | 14 | 188 | | | | | | | | | | | | 192 | | | | DH59 |
| AUG 01 | 09:00 | 22.0 | 157 | 8 | 188 | | | | | | | | | | | | 187 | | | | DH59 |
| AUG 30 | 09:59 | 13.0 | 181 | 7 | 188 | | | | | | | | | | | | 184 | | | | DH59 |
| AUG 30 | 10:00 | 13.0 | 181 | 8 | 188 | | | | | | | | | | | | 187 | | | | DH59 |
| OCT 03 | 15:29 | 8.0 | 171 | 8 | 188 | | | | | | | | | | | | 173 | | | | DH59 |
| OCT 03 | 15:30 | 8.0 | 171 | 8 | 188 | | | | | | | | | | | | 177 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT 188 METRES

## NORTH SASKATCHEWAN RIVER AT EDMONTON - STATION NO. 05DF001

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | JUL-JUL | M-MS | 1 580 | JUL 13 | 220 | JUL 16 | --- | --- | --- | --- | --- |
| 1975 | MAY-SEP # | M-MS | 87 | MAY 16 | 3 | SEP 23 * | --- | --- | --- | --- | --- |
| 1976 | APR-JUL # | M-MS | 143 | APR 09 | 34 | JUL 22 | --- | --- | --- | --- | --- |
| 1977 | MAY-SEP # | M-MS | 2 480 | MAY 30 * | 25 | SEP 28 | --- | --- | --- | --- | --- |
| 1978 | APR-NOV # | M-MS | 777 | JUN 08 | 7 | AUG 31 | --- | --- | --- | --- | --- |
| 1979 | APR-NOV # | M-MS | 400 | APR 27 | 7 | AUG 23 | --- | --- | --- | --- | --- |
| 1980 | JUN-SEP # | M-MS | 142 | JUN 02 | 26 | SEP 25 | --- | --- | --- | --- | --- |
| 1981 | MAY-JUN # | M-MS | 257 | MAY 26 | 84 | MAY 07 | --- | --- | --- | --- | --- |
| 1982 | MAY-OCT # | M-MS | 1 980 | JUL 07 | 11 | AUG 10 | --- | --- | --- | --- | --- |
| 1983 | APR-NOV # | M-MS | 358 | APR 26 | 8 | AUG 31 | --- | --- | --- | --- | --- |
| 1984 | APR-OCT | M-MS | 251 | JUN 13 | 8 | OCT 03 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

NORTH SASKATCHEWAN RIVER AT SAUNDERS - STATION NO. 05DC002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | JUN-NOV # | M-MS | 24 | NOV 04 | 3 | JUL 22 * | --- | --- | --- | --- | --- |
| 1976 | APR-OCT # | M-MS | 34 | JUL 13 | 5 | APR 27 | --- | --- | --- | --- | --- |
| 1977 | APR-SEP # | M-MS | 28 | JUN 16 | 4 | SEP 12 | --- | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 111 | JUN 01 * | 3 | AUG 28 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT - STATION NO. 05DA009

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 30 | 13:45 | 8.0 | 7.78 | 0 | WELB X | | | | | | | | | | | | 180 | | | | D16 |
| MAY 29 | 16:05 | 13.0 | 18.1 | 13 | 4.6 | | | | | | | | | | | | 188 | | | | D49 |
| JUN 26 | 12:20 | 10.0 | 178 | 110 | 4.6 | | | | | | | | | | | | 89 | | | | D49 |
| JUL 31 | 13:00 | 12.0 | 244 | 236 | 4.6 | | | | | | | | | | | | 88 | | | | D49 |
| AUG 30 | 11:15 | 8.0 | 88.2 | 56 | 4.6 | | | | | | | | | | | | 83 | | | | D49 |
| SEP 25 | 13:30 | | 42.3 | 9 | 4.6 | | | | | | | | | | | | 108 | | | | D16 |

NOTE : SINGLE VERTICAL LOCATED AT 4.6 METRES

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT - STATION NO. 05DA009

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : APR-OCT MEAN LOAD (TONNES) | SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : APR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-DEC | B-S | 274 | JUN 12 | 9 | NOV 27 | 20 300 | JUN 11 * | 257 000 | | --- | --- | --- |
| 1973 | JAN-DEC | B-C | 828 | MAY 18 * | 0 | NOV 20 * | 20 200 | JUN 24 | 276 000 | * | 1 300 | 1 300 | --- |
| 1974 | JAN-DEC | B-C | 580 | JUL 18 | 1 | NOV 27 | 13 400 | JUN 17 | 258 000 | | 1 210 | 1 280 | 3.8 |
| 1975 | JAN-DEC | B-C | 570 | JUL 13 | 0 | JAN 15 | 14 100 | JUL 13 | 250 000 | | 1 170 | 1 230 | 3.1 |
| 1976 | JAN-DEC # | B-S | 271 | AUG 25 | 2 | FEB 24 | 5 540 | AUG 04 | 188 000 | | --- | --- | --- |
| 1977 | JAN-DEC | M-C | 808 | JUN 08 | 1 | NOV 15 | 10 000 | JUN 08 | 137 000 | | 637 | 1 040 | 13.9 |
| 1978 | JAN-DEC | M-C | 466 | SEP 04 | 1 | JAN 09 | 9 080 | JUL 27 | 280 000 | | 1 220 | 1 110 | 10.8 |
| 1979 | JAN-NOV # | M-S | 503 | JUN 01 | 2 | JAN 15 | 10 300 | MAY 27 | 228 000 | | 1 070 | 1 100 | 8.9 |
| 1980 | APR-SEP | M-S | 784 | JUL 23 | 5 | SEP 27 | 15 100 | JUL 23 | 209 000 | | --- | --- | --- |
| 1981 | MAY-OCT | M-S | 437 | JUL 28 | 5 | MAY 05 | 10 800 | JUL 28 | 257 000 | | --- | --- | --- |
| 1982 | JUN-OCT # | M-MS | 128 | JUL 27 | 7 | OCT 19 | | --- | --- | | --- | --- | --- |
| 1983 | APR-OCT # | M-MS | 241 | MAY 31 | 2 | OCT 18 | | --- | --- | | --- | --- | --- |
| 1984 | APR-SEP | M-MS | 236 | JUL 31 | 0 | APR 30 | | --- | --- | | --- | --- | --- |

B - BOTH AUTOMATIC AND MANUAL SAMPLING M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

NORTH SASKATCHEWAN RIVER NEAR ROCKY MOUNTAIN HOUSE - STATION NO. 05DC001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAY-OCT MEAN LOAD (TONNES) | SUMMARY : MAY-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAY-OCT HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1970 | JUL-JUL | M-MS | 156 | JUL 15 | 156 | JUL 15 | --- | | --- | | --- | --- | --- |
| 1971 | APR-DEC | M-S | 3 160 | JUN 05 | 1 | DEC 21 | 200 000 | JUN 05 | 1 030 000 | | 5 510 | 5 510 | --- |
| 1972 | JAN-DEC | M-C | 5 480 | JUN 25 * | 0 | NOV 13 * | 893 000 | JUN 25 * | 2 450 000 | * | 13 400 | 8 480 | 61.7 |
| 1973 | JAN-OCT # | M-S | 1 670 | MAY 17 | 1 | FEB 27 | 40 000 | MAY 18 | 385 000 | | 1 920 | 8 840 | 28.8 |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

NOTIKEWIN RIVER AT MANNING - STATION NO. 07HC001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 11 | 12:45 | 3.0 | 5.60 B | 38 | MID | | | | | | | | | | | | 428 | | | | DH59 |
| APR 18 | 11:20 | 5.0 | 25.5 | 285 | MID | | | | | | | | | | | | 181 | | | | DH59 |
| MAY 26 | 10:55 | 8.0 | 98.4 | 893 | MID | 16 | 24 | 35 | 43 | 65 | 84 | 74 | 93 | 99 | 100 | | 166 | 36 | 40 | 24 | DH59 |
| MAY 30 | 11:20 | 10.5 | 67.0 | 497 | MID | 20 | 29 | 43 | 50 | 64 | 74 | 82 | 95 | 100 | | | 187 | 26 | 45 | 29 | DH59 |
| JUN 28 | 12:30 | 18.0 | 8.38 | 13 | MID | | | | | | | | | | | | 218 | | | | DH59 |
| AUG 02 | 08:50 | 22.5 | 4.82 | 8 | MID | | | | | | | | | | | | 258 | | | | DH59 |
| AUG 30 | 09:05 | 9.0 | 5.64 | 9 | MID | | | | | | | | | | | | 257 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): B - ICE CONDITIONS

NOTIKEWIN RIVER AT MANNING - STATION NO. 07HC001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | SEP-NOV # | M-MS | 81 | SEP 18 | 6 | NOV 01 | --- | | --- | | --- | --- | --- |
| 1975 | APR-OCT # | M-MS | 611 | APR 28 | 4 | AUG 11 | --- | | --- | | --- | --- | --- |
| 1976 | APR-OCT # | M-MS | 2 520 | JUN 29 | 13 | OCT 01 | --- | | --- | | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 281 | APR 18 | 13 | JUL 28 | --- | | --- | | --- | --- | --- |
| 1978 | MAY-OCT # | M-MS | 3 400 | MAY 25 | 5 | AUG 31 | --- | | --- | | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 2 080 | MAY 11 | 9 | OCT 26 | --- | | --- | | --- | --- | --- |
| 1980 | APR-SEP # | M-MS | 163 | SEP 26 | 16 | SEP 02 | --- | | --- | | --- | --- | --- |
| 1981 | MAY-OCT # | M-MS | 84 | MAY 25 | 8 | OCT 26 | --- | | --- | | --- | --- | --- |
| 1982 | MAY-AUG # | M-MS | 1 650 | MAY 03 | 2 | JUL 23 * | --- | | --- | | --- | --- | --- |
| 1983 | MAY-SEP # | M-MS | 3 580 | JUN 21 * | 7 | SEP 01 | --- | | --- | | --- | --- | --- |
| 1984 | APR-AUG | M-MS | 893 | MAY 26 | 8 | AUG 02 | --- | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

OLDMAN RIVER NEAR BROOKET - STATION NO. 05AA024

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 49 33 27 N LONG 113 49 20 W
DRAINAGE AREA: 4 400 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 15 726.67 TONNES FOR THE PERIOD MAR 26 TO OCT 31

REMARKS:

| | MAR | | | APR | | | MAY | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 6.93 | | | 6.71 | 4 | 2.32 | 16.5 | 10 S | 15.0 | 1 |
| 2 | 7.36 | | | 6.36 | 5 | 2.75 | 17.7 | 11 | 16.8 | 2 |
| 3 | 6.99 | | | 6.36 | 5 | 2.75 | 16.4 | 10 | 15.9 | 3 |
| 4 | 6.60 | | | 6.84 | 5 | 3.00 | 16.3 | 9 | 14.2 | 4 |
| 5 | 6.76 | | | 7.54 | 5 | 3.26 | 16.4 | 8 | 12.7 | 5 |
| 6 | 6.82 | | | 6.61 | 5 | 3.63 | 16.7 | 7 | 11.3 | 6 |
| 7 | 6.72 | | | 6.87 | 5 | 3.75 | 16.0 | 6 S | 9.33 | 7 |
| 8 | 6.74 | | | 6.61 | 5 | 3.63 | 17.9 | 10 | 15.5 | 8 |
| 9 | 4.70 S | | | 6.38 | 5 | 3.62 | 20.5 | 25 | 46.1 | 9 |
| 10 | 4.25 S | | | 6.13 | 5 | 3.51 | 26.9 | 38 | 81.3 | 10 |
| 11 | 3.90 S | | | 6.15 | 5 | 3.52 | 25.0 | 35 | 75.6 | 11 |
| 12 | 3.80 S | | | 7.84 | 5 S | 3.38 | 23.7 | 35 | 71.7 | 12 |
| 13 | 3.45 S | | | 7.48 | 5 | 3.33 | 24.7 | 35 | 74.7 | 13 |
| 14 | 3.35 S | | | 7.84 | 5 | 3.26 | 29.2 | 44 | 111 | 14 |
| 15 | 3.40 S | | | 8.79 | 5 | 3.80 | 53.1 | 104 | 477 | 15 |
| 16 | 3.60 S | | | 12.0 | 8 | 8.32 | 38.1 | 156 | 1 330 | 16 |
| 17 | 4.20 S | | | 19.4 | 13 | 21.8 | 101 | 148 S | 1 270 | 17 |
| 18 | 5.00 S | | | 31.4 | 26 | 70.8 | 83.1 | 131 | 841 | 18 |
| 19 | 5.70 S | | | 37.2 | 36 | 118 | 74.8 | 108 | 695 | 19 |
| 20 | 6.80 S | | | 40.8 | 39 | 137 | 84.1 | 75 | 545 | 20 |
| 21 | 7.91 | | | 37.5 | 37 | 120 | 88.1 | 49 S | 373 | 21 |
| 22 | 8.53 | | | 36.8 | 34 | 114 | 73.6 | 32 S | 203 | 22 |
| 23 | 9.45 | | | 36.4 | 30 | 99.5 | 84.8 | 30 | 112 | 23 |
| 24 | 9.71 | | | 34.2 | 25 | 76.8 | 62.0 | 17 S | 91.1 | 24 |
| 25 | 8.75 | | | 30.3 | 23 | 60.2 | 55.1 | 16 | 77.8 | 25 |
| 26 | 7.76 | 4 S | 2 89 | 27.4 | 20 | 47.3 | 51.8 | 17 | 76.1 | 26 |
| 27 | 7.82 | 4 | 2 83 | 24.8 | 17 | 36.6 | 49.7 | 17 | 73.0 | 27 |
| 28 | 8.84 | 4 | 2 40 | 23.0 | 14 | 27.8 | 51.1 | 17 | 75.1 | 28 |
| 29 | 7.17 | 4 | 2 46 | 21.0 | 11 | 20.0 | 57.4 | 17 S | 84.3 | 29 |
| 30 | 7.37 | 4 | 2 51 | 18.4 | 8 S | 13.4 | 89.3 | 21 | 162 | 30 |
| 31 | 8.71 | 4 | 3 33 | | | | 132 | 35 S | 389 | 31 |
| TOTAL | 194.59 | | 15.03 | 551.41 | | 1 016.84 | 1 595.8 | | 7 936.33 | TOTAL |

| | JUN | | | JUL | | | AUG | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 109 | 30 | 283 | 80.2 | 12 | 82.4 | 16.0 | 6 | 9.33 | 1 |
| 2 | 85.6 | 31 S | 230 | 52.6 | 11 | 80.0 | 17.9 | 7 | 10.8 | 2 |
| 3 | 74.2 | 32 | 205 | 47.6 | 9 S | 37.2 | 18.7 | 7 | 11.8 | 3 |
| 4 | 68.5 | 32 | 192 | 44.6 | 9 | 34.7 | 18.9 | 7 S | 11.4 | 4 |
| 5 | 68.3 | 32 | 189 | 42.6 | 9 | 33.1 | 17.7 | 7 | 10.7 | 5 |
| 6 | 70.5 | 32 S | 195 | 44.0 | 9 | 36.2 | 16.4 | 7 | 9.82 | 6 |
| 7 | 74.4 | 34 | 219 | 42.5 | 9 | 33.0 | 16.5 | 6 | 8.04 | 7 |
| 8 | 82.4 | 35 | 249 | 39.1 | 8 | 27.0 | 14.5 | 6 | 7.52 | 8 |
| 9 | 83.5 | 35 | 253 | 36.0 | 8 | 24.9 | 13.8 | 6 S | 7.15 | 9 |
| 10 | 68.1 | 32 S | 244 | 33.5 | 8 S | 23.2 | 13.4 | 6 | 6.95 | 10 |
| 11 | 63.1 | 28 | 208 | 31.3 | 8 | 21.6 | 13.0 | 6 | 6.74 | 11 |
| 12 | 61.6 | 26 | 197 | 30.1 | 9 | 23.4 | 12.3 | 6 | 6.32 | 12 |
| 13 | 63.0 | 26 S | 201 | 28.2 | 9 | 22.7 | 12.7 | 6 | 6.49 | 13 |
| 14 | 67.2 | 31 | 234 | 26.9 | 10 | 24.7 | 12.3 | 6 S | 6.31 | 14 |
| 15 | 97.7 | 35 | 295 | 27.2 | 11 | 26.9 | 11.7 | 6 | 6.06 | 15 |
| 16 | 103 | 36 | 320 | 25.8 | 11 | 24.5 | 11.1 | 4 | 3.84 | 16 |
| 17 | 101 | 33 | 288 | 24.3 | 12 | 25.2 | 10.6 | 4 | 3.73 | 17 |
| 18 | 92.3 | 28 | 223 | 23.5 | 12 | 24.4 | 10.6 | 4 | 3.72 | 18 |
| 19 | 83.7 | 22 S | 159 | 22.7 | 13 S | 25.5 | 10.6 | 4 | 3.83 | 19 |
| 20 | 78.4 | 20 | 135 | 21.6 | 14 | 26.4 | 10.1 | 3 S | 2.82 | 20 |
| 21 | 81.2 | 22 | 154 | 21.3 | 15 | 23.1 | 9.88 | 3 | 2.58 | 21 |
| 22 | 90.9 | 25 | 196 | 21.4 | 23 | 42.5 | 9.77 | 3 | 2.63 | 22 |
| 23 | 84.7 | 19 S | 139 | 19.8 | 28 | 47.9 | 9.89 | 3 S | 2.81 | 23 |
| 24 | 81.6 | 18 | 127 | 18.8 | 29 | 46.6 | 9.65 | 3 | 2.80 | 24 |
| 25 | 82.1 | 21 | 149 | 17.5 | 30 S | 45.4 | 9.33 | 3 | 2.39 | 25 |
| 26 | 81.1 | 22 S | 154 | 16.5 | 29 | 40.6 | 8.83 | 2 | 1.49 | 26 |
| 27 | 78.0 | 19 | 135 | 16.5 | 31 | 29.9 | 8.38 | 2 | 1.48 | 27 |
| 28 | 78.4 | 16 S | 103 | 16.9 | 13 | 19.0 | 7.84 | 1 | 0.89 | 28 |
| 29 | 88.6 | 15 | 90.1 | 16.1 | 8 | 13.2 | 8.70 | 1 S | 0.75 | 29 |
| 30 | 87.1 | 13 | 75.4 | 30.6 | 9 S | 10.7 | 8.28 | 1 | 0.72 | 30 |
| 31 | | | | 19.6 | 8 | 10.1 | 8.27 | 1 | 0.71 | 31 |
| TOTAL | 2 497.3 | | 5 884.5 | 916.4 | | 943.0 | 379.42 | | 188.47 | TOTAL |

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR BROCKET - STATION NO. 05AA024

SUSPENDED SEDIMENT FOR 1984

| DAY | SEP DAILY DISCHARGE ($m^3/s$) | SEP MEAN CONCENTRATION (mg/L) | SEP DAILY LOAD (t) | OCT DAILY DISCHARGE ($m^3/s$) | OCT MEAN CONCENTRATION (mg/L) | OCT DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.73 | 1 | 0.75 | 10.4 | 4 | 3.58 | | | | 1 |
| 2 | 8.82 | 2 | 1.52 | 10.6 | 4 S | 3.68 | | | | 2 |
| 3 | 8.80 | 2 | 1.49 | 11.5 | 4 | 3.97 | | | | 3 |
| 4 | 8.49 | 2 | 1.47 | 13.8 | 4 | 4.48 | | | | 4 |
| 5 | 8.13 | 2 | 1.40 | 13.3 | 4 | 4.60 | | | | 5 |
| 6 | 7.77 | 2 | 1.34 | 14.2 | 4 | 4.91 | | | | 6 |
| 7 | 8.22 | 2 | 1.42 | 13.8 | 4 | 4.80 | | | | 7 |
| 8 | 8.59 | 3 | 2.23 | 13.3 | 4 | 4.56 | | | | 8 |
| 9 | 8.33 | 3 | 2.16 | 12.7 | 4 | 4.38 | | | | 9 |
| 10 | 9.06 | 3 | 2.56 | 12.3 | 4 | 4.25 | | | | 10 |
| 11 | 9.56 | 3 | 2.48 | 12.2 | 4 | 4.22 | | | | 11 |
| 12 | 9.87 | 3 S | 2.61 | 11.8 | 4 | 4.11 | | | | 12 |
| 13 | 9.53 | 3 | 2.47 | 12.8 | 4 | 4.32 | | | | 13 |
| 14 | 9.17 | 3 | 2.36 | 12.7 | 4 | 4.39 | | | | 14 |
| 15 | 8.87 | 3 | 2.30 | 12.8 | 4 | 4.32 | | | | 15 |
| 16 | 8.57 | 3 | 2.22 | 13.3 | 4 | 4.25 | | | | 16 |
| 17 | 8.18 | 3 | 2.12 | 12.2 | 4 | 4.22 | | | | 17 |
| 18 | 7.90 | 3 | 2.05 | 11.7 | 4 | 4.04 | | | | 18 |
| 19 | 7.69 | 3 S | 1.99 | 11.7 | 4 | 4.04 | | | | 19 |
| 20 | 8.34 | 4 | 2.85 | 11.1 | 4 | 3.84 | | | | 20 |
| 21 | 10.1 | 4 | 3.48 | 8.42 | 4 | 2.91 | | | | 21 |
| 22 | 12.1 | 4 | 4.18 | 9.65 | 4 | 3.34 | | | | 22 |
| 23 | 12.1 | 4 | 4.18 | 9.80 | 4 | 3.39 | | | | 23 |
| 24 | 11.3 | 4 | 3.91 | 10.9 | 4 | 3.77 | | | | 24 |
| 25 | 10.5 | 4 | 3.63 | 10.4 | 4 | 3.59 | | | | 25 |
| 26 | 10.8 | 4 | 3.85 | 10.6 | 4 | 3.66 | | | | 26 |
| 27 | 10.3 | 4 | 3.56 | 9.02 | 4 | 3.12 | | | | 27 |
| 28 | 9.85 | 4 | 3.44 | 6.60 S | 4 | 2.28 | | | | 28 |
| 29 | 9.80 | 4 | 3.42 | 5.46 S | 4 | 1.89 | | | | 29 |
| 30 | 10.2 | 4 | 3.53 | 4.72 S | 4 | 1.63 | | | | 30 |
| 31 | | | | 5.06 S | 4 | 1.75 | | | | 31 |
| TOTAL | 280.07 | | 75.73 | 336.43 | | 116.27 | | | | TOTAL |

S - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR BROCKET - STATION NO. 05AA024

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 26 | 16:30 | 3.0 | 7.61 | 4 | MID X | | | | | | | | | | | | 212 | | | | DH48 |
| APR 12 | 13:50 | 5.0 | 7.87 | 5 | MID X | | | | | | | | | | | | 216 | | | | DH48 |
| APR 30 | 16:00 | 5.0 | 20.2 | 7 | 46.0 | | | | | | | | | | | | 182 | | | | D48 |
| MAY 01 | 14:50 | 5.0 | 18.2 | 11 | MID X | | | | | | | | | | | | 185 | | | | DH48 |
| MAY 07 | 19:30 | | 18.0 | 8 | 46.0 | | | | | | | | | | | | 182 | | | | D48 |
| MAY 17 | 11:00 | | 103 | 148 | 46.0 | | | | | | | | | | | | 149 | | | | D48 |
| MAY 21 | 10:30 | | 88.8 | 60 | 46.0 | | | | | | | | | | | | | | | | D48 |
| MAY 22 | 12:25 | 8.0 | 77.4 | 33 | 46.0 | | | | | | | | | | | | 142 | | | | D48 |
| MAY 24 | 15:30 | | 88.6 | 15 | 46.0 | | | | | | | | | | | | | | | | D48 |
| MAY 29 | 15:30 | 15.0 | 82.4 | 17 | 46.0 | | | | | | | | | | | | | | | | D48 |
| MAY 31 | 15:30 | 12.0 | 131 | 30 | 46.0 | | | | | | | | | | | | 134 | | | | D48 |
| JUN 02 | 10:30 | 12.0 | 80.1 | 32 | 46.0 | | | | | | | | | | | | | | | | D48 |
| JUN 06 | 15:30 | 14.0 | 72.3 | 32 | 46.0 | | | | | | | | | | | | | | | | D48 |
| JUN 10 | 11:30 | 9.0 | 69.1 | 32 | 46.0 | | | | | | | | | | | | 141 | | | | D48 |
| JUN 13 | 13:30 | 13.0 | 85.3 | 26 | 46.0 | | | | | | | | | | | | 147 | | | | D48 |
| JUN 19 | 10:30 | 13.0 | 84.6 | 21 | 46.0 | | | | | | | | | | | | 137 | | | | D48 |
| JUN 23 | 16:00 | 12.0 | 84.8 | 17 | 46.0 | | | | | | | | | | | | 138 | | | | D48 |
| JUN 26 | 11:00 | 15.0 | 82.1 | 23 | 46.0 | | | | | | | | | | | | 141 | | | | D48 |
| JUN 28 | 09:00 | 13.0 | 77.4 | 18 | 46.0 | | | | | | | | | | | | 138 | | | | D48 |
| JUL 03 | 19:30 | 16.0 | 46.8 | 5 | 46.0 | | | | | | | | | | | | 151 | | | | D48 |
| JUL 10 | 20:00 | 20.0 | 32.6 | 6 | 46.0 | | | | | | | | | | | | | | | | D48 |
| JUL 18 | 14:30 | 20.0 | 22.7 | 5 | 46.0 | | | | | | | | | | | | 178 | | | | D48 |
| JUL 19 | 14:31 | 20.0 | 23.7 | 30 | 46.0 | | | | | | | | | | | | 185 | | | | D48 |
| JUL 25 | 12:30 | 20.0 | 17.5 | 30 | 46.0 | | | | | | | | | | | | | | | | DH48 |
| JUL 30 | 17:00 | 17.0 | 30.0 | 5 | MID X | | | | | | | | | | | | 178 | | | | D48 |
| AUG 4 | 11:30 | 16.0 | 18.7 | 7 | 46.0 | | | | | | | | | | | | | | | | D48 |
| AUG 8 | 16:30 | 17.0 | 13.8 | 5 | 46.0 | | | | | | | | | | | | 173 | | | | D48 |
| AUG 14 | 19:30 | 18.0 | 12.1 | 5 | 46.0 | | | | | | | | | | | | 180 | | | | D48 |
| AUG 14 | 19:31 | 19.0 | 13.1 | 3 | 46.0 | | | | | | | | | | | | 178 | | | | D48 |
| AUG 20 | 18:30 | 19.0 | 10.2 | 3 | 46.0 | | | | | | | | | | | | | | | | D48 |
| AUG 23 | 20:00 | | 8.85 | 3 | 46.0 | | | | | | | | | | | | | | | | D48 |
| AUG 29 | 10:25 | 11.0 | 8.87 | 1 | MID X | | | | | | | | | | | | 187 | | | | DH48 |
| SEP 12 | 11:45 | 10.0 | 8.72 | 3 | 46.0 | | | | | | | | | | | | 182 | | | | D48 |
| SEP 18 | 14:45 | 13.0 | 7.70 | 3 | 46.0 | | | | | | | | | | | | | | | | D48 |
| SEP 19 | 15:15 | 13.0 | 7.79 | 4 | 46.0 | | | | | | | | | | | | 184 | | | | D48 |
| OCT 02 | 12:30 | 11.0 | 10.7 | 4 | 46.0 | | | | | | | | | | | | 188 | | | | D48 |

NOTE : SINGLE VERTICAL LOCATED AT 46 METRES

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

OLDMAN RIVER NEAR BROCKET - STATION NO. 05AA024

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1965 | MAY-DEC | M-S | 330 | JUN 05 | 1 | OCT 10 | 7 180 | JUN 05 | 81 900 | | --- | --- | --- |
| 1967 | JAN-DEC | M-C | 2 500 | MAY 31 | 2 | JAN 11 | 137 000 | MAY 31 | 903 000 | | 3 680 | 3 880 | --- |
| 1968 | JAN-DEC | M-C | 948 | MAY 23 | 1 | JAN 08 | 24 400 | MAY 23 | 77 700 | | 311 | 2 000 | 84.2 |
| 1969 | JAN-DEC | M-C | 1 830 | JUN 28 | 0 | SEP 15 * | 73 800 | JUN 28 | 248 000 | | 1 010 | 1 870 | 81.5 |
| 1970 | JAN-DEC | M-C | 972 | JUN 14 | 0 | OCT 22 | 29 500 | JUN 14 | 127 000 | | 517 | 1 380 | 55.6 |
| 1971 | JAN-DEC | M-C | 540 | MAY 08 | 1 | SEP 21 | 12 700 | MAY 28 | 131 000 | | 530 | 1 210 | 51.9 |
| 1972 | JAN-DEC | M-C | 1 720 | MAY 31 | 0 | OCT 27 | 94 500 | JUN 01 | 883 000 | | 2 790 | 1 470 | 39.2 |
| 1973 | JAN-DEC | M-C | 531 | MAY 18 | 0 | OCT 31 | 8 820 | MAY 18 | 42 800 | | 172 | 1 280 | 40.4 |
| 1974 | JAN-DEC | M-C | 987 | MAY 08 | 2 | SEP 25 | 23 900 | JUN 17 | 277 000 | | 1 130 | 1 270 | 35.8 |
| 1975 | JAN-DEC | M-C | 5 580 | JUN 20 * | 0 | FEB 23 | 588 000 | JUN 20 * | 1 110 000 | * | 4 500 | 1 630 | 32.8 |
| 1976 | JAN-DEC | M-C | 2 130 | AUG 06 | 1 | SEP 29 | 49 500 | AUG 08 | 177 000 | | 718 | 1 540 | 31.7 |
| 1977 | JAN-DEC | M-C | 108 | APR 07 | 3 | JAN 05 | 283 | APR 09 | 6 990 | | 27.1 | 1 400 | 33.0 |
| 1978 | JAN-DEC | M-C | 1 220 | MAY 15 | 2 | FEB 14 | 20 000 | MAY 15 | 222 000 | | 905 | 1 380 | 31.2 |
| 1979 | JAN-OCT | M-S | 387 | MAY 25 | 1 | SEP 01 | 8 510 | MAY 27 | 88 100 | | 358 | 1 280 | 31.1 |
| 1980 | MAR-NOV # | M-S | 844 | MAY 27 | 4 | NOV 02 | 13 800 | MAY 27 | 78 100 | | 323 | 1 210 | 31.0 |
| 1981 | MAR-OCT | M-S | 1 700 | MAY 22 | 4 | OCT 27 | 70 100 | MAY 22 | 405 000 | | 1 850 | 1 240 | 28.2 |
| 1982 | APR-SEP | M-S | 463 | MAY 26 | 4 | AUG 30 | 7 240 | MAY 26 | 55 600 | | --- | --- | --- |
| 1983 | MAR-OCT | M-S | 241 | MAY 27 | 2 | SEP 20 | 3 980 | MAY 26 | 34 200 | | 140 | 1 170 | 28.6 |
| 1984 | MAR-OCT | M-S | 148 | MAY 17 | 1 | AUG 29 | 1 320 | MAY 18 | 15 700 | | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 49 42 30 N LONG 112 52 30 W
DRAINAGE AREA: 17 000 km²
TYPE OF FLOW: REGULATED SINCE 1910
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 24 071.95 TONNES FOR THE PERIOD MAR 01 TO NOV 08

REMARKS:

| | MAR | | | APR | | | MAY | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 13.2 B | 19 | 21.7 | 12.9 | 5 S | 5.53 | 9.77 | 12 S | 10.1 | 1 |
| 2 | 13.5 B | 21 | 24.5 | 12.7 | 5 | 5.59 | 8.63 | 11 | 8.20 | 2 |
| 3 | 13.7 B | 19 | 22.5 | 12.3 | 6 | 6.38 | 7.55 | 11 | 7.19 | 3 |
| 4 | 13.4 B | 15 | 17.4 | 11.8 | 7 | 7.14 | 8.81 | 11 | 8.47 | 4 |
| 5 | 13.0 B | 19 | 21.3 | 11.5 | 7 | 6.95 | 8.33 | 10 | 5.47 | 5 |
| 6 | 12.4 B | 13 S | 13.9 | 11.8 | 7 | 7.14 | 8.35 | 10 S | 5.50 | 6 |
| 7 | 12.3 B | 14 | 14.9 | 12.7 | 8 | 8.78 | 8.50 | 11 | 8.18 | 7 |
| 8 | 12.1 B | 13 | 13.6 | 12.8 | 8 S | 8.85 | 8.74 | 11 | 8.41 | 8 |
| 9 | 11.4 B | 16 | 15.8 | 13.8 | 8 | 8.54 | 8.59 | 12 | 8.83 | 9 |
| 10 | 11.8 B | 14 | 13.3 | 13.7 | 9 | 10.7 | 5.75 | 13 | 8.48 | 10 |
| 11 | 10.5 B | 11 | 9.98 | 13.0 | 10 | 11.2 | 4.98 | 13 | 5.59 | 11 |
| 12 | 10.0 B | 14 | 12.1 | 13.0 | 10 | 11.2 | 7.35 | 17 | 10.8 | 12 |
| 13 | 8.80 B | 15 | 9.12 | 12.7 | 11 | 12.1 | 9.15 | 15 S | 11.9 | 13 |
| 14 | 5.80 B | 8 | 4.01 | 12.5 | 11 | 11.9 | 8.99 | 24 | 18.8 | 14 |
| 15 | 5.80 B | 9 | 4.51 | 11.9 | 12 | 12.3 | 9.82 | 42 | 34.9 | 15 |
| 16 | 8.80 B | 11 | 8.27 | 11.3 | 11 S | 10.7 | 14.3 | 73 | 90.2 | 16 |
| 17 | 10.0 B | 13 | 11.2 | 8.85 | 9 | 7.85 | 58.0 | 97 | 486 | 17 |
| 18 | 13.0 B | 10 S | 11.2 | 8.26 | 8 | 6.42 | 71.5 | 84 | 581 | 18 |
| 19 | 15.7 B | 12 | 16.3 | 10.5 | 12 | 10.9 | 59.7 | 82 | 423 | 19 |
| 20 | 16.0 | 13 S | 18.0 | 16.8 | 15 | 21.8 | 52.5 | 73 S | 331 | 20 |
| 21 | 15.5 | 11 | 14.8 | 22.3 | 19 | 35.5 | 55.5 | 82 | 400 | 21 |
| 22 | 14.5 | 10 | 12.6 | 23.7 | 18 S | 36.9 | 82.8 | 79 S | 429 | 22 |
| 23 | 13.9 | 9 | 10.8 | 20.8 | 17 | 30.8 | 83.5 | 80 | 277 | 23 |
| 24 | 14.1 | 8 | 9.75 | 21.9 | 19 | 36.0 | 48.8 | 41 S | 185 | 24 |
| 25 | 14.8 | 7 S | 9.01 | 22.1 | 17 | 32.5 | 46.5 | 37 | 149 | 25 |
| 26 | 15.9 | 7 | 9.82 | 19.7 | 13 | 22.1 | 43.5 | 34 | 128 | 26 |
| 27 | 15.3 | 7 | 9.26 | 16.8 | 10 S | 14.5 | 41.3 | 31 | 111 | 27 |
| 28 | 14.1 | 7 | 8.53 | 14.2 | 11 | 13.5 | 39.1 | 29 | 98.0 | 28 |
| 29 | 13.5 | 7 | 8.16 | 12.1 | 12 | 12.5 | 36.3 | 27 | 84.7 | 29 |
| 30 | 13.2 | 7 S | 7.98 | 10.5 | 12 | 10.9 | 35.4 | 31 S | 97.5 | 30 |
| 31 | 13.0 | 7 | 7.86 | | | | 56.3 | 81 | 443 | 31 |
| TOTAL | 384.10 | | 389.95 | 429.71 | | 440.88 | 885.84 | | 4 444.00 | TOTAL |

| | JUN | | | JUL | | | AUG | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 88.1 | 256 S | 2 250 | 88.1 E | 169 S | 1 290 | 8.82 | 29 | 22.1 | 1 |
| 2 | 90.0 | 190 | 1 480 | 80.8 E | 135 | 942 | 8.03 | 31 | 21.5 | 2 |
| 3 | 88.0 | 70 S | 411 | 73.3 A | 82 S | 583 | 7.30 | 32 | 20.2 | 3 |
| 4 | 56.2 | 36 | 175 | 57.2 | 84 S | 287 | 7.13 | 35 | 21.5 | 4 |
| 5 | 51.3 | 24 S | 106 | 35.4 | 26 S | 79.5 | 8.55 | 36 | 20.4 | 5 |
| 6 | 48.8 | 20 | 84.3 | 26.2 | 18 | 40.7 | 8.23 | 37 | 19.9 | 6 |
| 7 | 49.7 | 23 S | 98.8 | 23.1 A | 16 | 35.9 | 8.07 | 38 S | 20.5 | 7 |
| 8 | 55.8 | 28 | 135 | 27.6 E | 18 | 42.9 | 8.98 | 33 | 17.0 | 8 |
| 9 | 53.5 | 36 S | 186 | 29.2 E | 19 | 47.8 | 5.32 | 29 | 13.3 | 9 |
| 10 | 74.8 | 55 | 355 | 21.7 E | 20 | 37.5 | 5.08 | 24 | 10.5 | 10 |
| 11 | 72.9 | 44 S | 277 | 15.0 A | 22 | 28.5 | 5.13 | 21 | 9.31 | 11 |
| 12 | 67.2 | 33 | 192 | 12.8 | 32 S | 35.4 | 5.35 | 18 | 8.32 | 12 |
| 13 | 84.5 | 31 S | 173 | 11.1 | 31 | 29.7 | 5.42 | 18 | 8.88 | 13 |
| 14 | 85.0 | 33 | 185 | 10.3 | 29 | 25.8 | 5.50 | 14 | 7.88 | 14 |
| 15 | 88.5 | 44 S | 250 | 9.35 | 27 | 21.6 | 5.91 | 13 S | 8.64 | 15 |
| 16 | 77.1 | 67 | 448 | 8.52 | 24 | 17.7 | 5.49 | 13 | 8.17 | 16 |
| 17 | 84.1 | 88 S | 501 | 7.44 | 18 | 10.8 | 5.07 | 13 | 5.89 | 17 |
| 18 | 84.4 | 82 | 462 | 8.58 | 12 S | 8.80 | 5.05 | 13 | 5.88 | 18 |
| 19 | 75.4 | 46 S | 313 | 8.67 | 12 | 5.77 | 5.02 | 13 | 5.84 | 19 |
| 20 | 85.8 | 37 | 214 | 4.78 | 11 | 4.82 | 4.58 | 13 | 5.12 | 20 |
| 21 | 85.2 | 27 S | 152 | 4.38 | 11 | 4.17 | 3.90 | 13 | 4.38 | 21 |
| 22 | 89.2 | 25 | 149 | 3.84 | 10 | 3.40 | 3.77 | 12 S | 3.81 | 22 |
| 23 | 76.0 | 58 S | 377 | 3.48 | 10 | 3.02 | 3.37 | 12 | 3.49 | 23 |
| 24 | 85.5 | 66 | 488 | 3.53 | 10 | 3.05 | 3.25 | 12 | 3.37 | 24 |
| 25 | 89.4 | 65 S | 557 | 3.39 | 11 S | 3.22 | 3.68 | 12 | 3.82 | 25 |
| 26 | 84.5 | 116 | 851 | 3.40 | 13 | 3.82 | 3.80 | 12 | 3.73 | 26 |
| 27 | 87.7 | 87 S | 735 | 3.83 | 14 | 4.39 | 3.33 | 12 | 3.45 | 27 |
| 28 | 84.9 | 69 S | 506 | 3.58 | 14 | 4.33 | 3.39 | 12 | 3.51 | 28 |
| 29 | 84.5 | 67 S | 489 | 4.63 | 18 | 6.26 | 3.31 | 12 S | 3.43 | 29 |
| 30 | 88.0 A | 122 | 928 | 8.18 | 17 | 9.08 | 2.98 | 15 | 3.84 | 30 |
| 31 | | | | 8.99 | 15 S | 9.08 | 3.91 | 23 | 7.77 | 31 |
| TOTAL | 2 208.6 | | 13 738.1 | 801.45 | | 3 808.89 | 158.47 | | 301.01 | TOTAL |

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007

SUSPENDED SEDIMENT FOR 1984

| DAY | SEP DAILY DISCHARGE ($m^3/s$) | SEP MEAN CONCENTRATION (mg/L) | SEP DAILY LOAD (t) | OCT DAILY DISCHARGE ($m^3/s$) | OCT MEAN CONCENTRATION (mg/L) | OCT DAILY LOAD (t) | NOV DAILY DISCHARGE ($m^3/s$) | NOV MEAN CONCENTRATION (mg/L) | NOV DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.88 | 21 | 8.51 | 11.2 | 12 | 11.8 | 10.8 E | 24 | 22.6 | 1 |
| 2 | 5.34 | 12 | 5.84 | 13.5 | 13 | 14.0 | 11.0 E | 17 | 16.2 | 2 |
| 3 | 5.75 | 10 | 4.98 | 12.8 | 13 S | 14.4 | 12.0 E | 22 | 22.8 | 3 |
| 4 | 5.36 | 10 | 4.85 | 11.4 | 13 | 12.8 | 13.0 E | 21 | 23.6 | 4 |
| 5 | 4.95 | 10 S | 4.28 | 11.3 | 13 | 12.7 | 15.0 E | 15 | 19.4 | 5 |
| 6 | 5.00 | 22 | 9.50 | 12.9 | 13 | 14.5 | 17.0 E | 11 | 18.2 | 6 |
| 7 | 9.92 | 35 | 30.0 | 13.9 | 12 | 14.4 | 21.0 E | 11 | 20.0 | 7 |
| 8 | 7.08 | 32 | 19.6 | 14.5 | 13 | 16.3 | 21.6 E | 13 S | 24.5 | 8 |
| 9 | 7.08 | 33 | 20.2 | 14.8 | 13 | 16.6 | 21.6 E | | | 9 |
| 10 | 6.64 | 34 | 19.5 | 15.7 | 12 S | 16.3 | 21.6 E | | | 10 |
| 11 | 6.16 | 28 | 14.9 | 16.6 | 13 | 18.5 | 21.2 E | | | 11 |
| 12 | 5.62 | 28 S | 13.6 | 16.4 | 14 | 19.8 | 20.5 E | | | 12 |
| 13 | 5.56 | 26 | 12.5 | 16.2 | 15 | 21.0 | 19.5 E | | | 13 |
| 14 | 5.50 | 24 | 11.5 | 16.1 | 17 | 23.5 | 18.0 E | | | 14 |
| 15 | 5.47 | 22 | 10.4 | 16.6 | 18 | 25.6 | 17.2 E | | | 15 |
| 16 | 4.87 | 20 | 8.42 | 17.4 | 19 | 28.6 | 17.5 E | | | 16 |
| 17 | 4.20 | 17 | 6.17 | 17.7 | 21 | 32.1 | 18.0 E | | | 17 |
| 18 | 3.93 | 17 S | 5.77 | 18.2 | 22 | 34.8 | 19.0 E | | | 18 |
| 19 | 3.70 | 37 S | 11.8 | 18.9 | 23 | 37.5 | 19.0 E | | | 19 |
| 20 | 5.74 | 39 | 19.3 | 19.0 | 24 | 39.4 | 19.0 E | | | 20 |
| 21 | 6.11 | 30 | 15.8 | 19.2 | 25 | 41.5 | 18.7 E | | | 21 |
| 22 | 7.06 | 26 | 15.8 | 19.0 | 27 | 44.3 | 18.0 E | | | 22 |
| 23 | 8.05 | 22 | 15.3 | 16.5 E | 28 | 39.9 | 17.0 E | | | 23 |
| 24 | 8.23 | 14 S | 12.6 | 15.0 E | 28 S | 38.7 | 15.5 E | | | 24 |
| 25 | 8.18 | 16 | 11.3 | 15.0 E | 25 | 32.4 | 15.0 E | | | 25 |
| 26 | 7.80 | 15 | 10.2 | 14.0 E | 25 | 30.2 | 13.5 E | | | 26 |
| 27 | 8.61 | 14 | 10.4 | 13.0 E | 25 | 28.1 | 12.5 E | | | 27 |
| 28 | 10.4 | 13 S | 11.7 | 12.5 E | 27 | 28.2 | 12.0 E | | | 28 |
| 29 | 10.5 | 13 S | 10.9 | 12.0 E | 25 | 27.0 | 11.5 E | | | 29 |
| 30 | 10.2 | 12 | 10.6 | 11.2 E | 25 | 24.2 | 11.4 E | | | 30 |
| 31 | | | | 11.0 E | 26 | 24.7 | | | | 31 |
| TOTAL | 197.93 | | 386.02 | 483.5 | | 784.9 | 488.3 | | 185.3 | TOTAL |

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP (°C) | INSTANT DISCHARGE (m³/s) | | INSTANT CONCENT (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 05 | 09:55 | 0.0 | 12.4 | B | 10 | 137 | | | | | | | | | | | | 231 | | | | DH59 |
| MAR 18 | 18:25 | 2.0 | 13.0 | B | 10 | 137 | | | | | | | | | | | | 248 | | | | DH59 |
| MAR 20 | 08:50 | 2.0 | 16.3 | | 13 | MID X | | | | | | | | | | | | | | | | SURF |
| MAR 25 | 15:50 | 1.0 | 15.1 | | 7 | 137 | | | | | | | | | | | | 252 | | | | DH59 |
| MAR 30 | 08:30 | 4.0 | 13.3 | | 7 | MID X | | | | | | | | | | | | | | | | DH48 |
| APR 01 | 12:40 | 3.0 | 12.5 | | 8 | 137 | | | | | | | | | | | | 260 | | | | DH59 |
| APR 08 | 13:45 | 4.0 | 12.8 | | 6 | 137 | | | | | | | | | | | | | | | | DH59 |
| APR 16 | 18:00 | 11.0 | 11.3 | | 10 | 137 | | | | | | | | | | | | 258 | | | | DH59 |
| APR 22 | 14:25 | 11.0 | 23.6 | | 17 | 137 | | | | | | | | | | | | 336 | | | | DH59 |
| APR 27 | 09:55 | 7.0 | 16.9 | | 8 | MID X | | | | | | | | | | | | | | | | DH48 |
| APR 27 | 15:05 | 14.0 | 15.6 | | 11 | 137 | | | | | | | | | | | | 228 | | | | DH59 |
| MAY 01 | 14:35 | 16.0 | 9.71 | | 12 | 137 | | | | | | | | | | | | 271 | | | | DH59 |
| MAY 08 | 18:35 | | 6.36 | | 10 | 137 | | | | | | | | | | | | | | | | DH59 |
| MAY 13 | 16:25 | 16.0 | 9.16 | | 15 | 137 | | | | | | | | | | | | | | | | DH59 |
| MAY 20 | 10:20 | 9.0 | 51.9 | | 70 | 137 | | | | | | | | | | | | 185 | | | | DH59 |
| MAY 22 | 09:45 | 7.0 | 54.4 | | 61 | 137 | | | | | | | | | | | | | | | | DH59 |
| MAY 24 | 09:40 | 9.0 | 45.9 | | 40 | 137 | | | | | | | | | | | | 181 | | | | DH59 |
| MAY 30 | 10:10 | 14.0 | 35.0 | | 24 | 137 | | | | | | | | | | | | 172 | | | | DH59 |
| JUN 01 | 08:45 | 9.0 | 106 | | 304 | 137 | | | | | | | | | | | | 144 | | | | DH59 |
| JUN 03 | 09:20 | 10.0 | 89.1 | | 89 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUN 05 | 08:55 | 10.0 | 51.6 | | 25 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUN 07 | 09:00 | 12.0 | 48.6 | | 22 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUN 09 | 09:30 | 8.0 | 61.3 | | 32 | 137 | | | | | | | | | | | | 170 | | | | DH59 |
| JUN 11 | 10:35 | 7.0 | 73.3 | | 46 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUN 13 | 09:50 | 14.0 | 84.6 | | 30 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUN 15 | 08:55 | 15.0 | 87.5 | | 38 | 137 | | | | | | | | | | | | 180 | | | | DH59 |
| JUN 17 | 09:25 | 15.0 | 84.0 | | 69 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUN 19 | 08:55 | 12.0 | 76.2 | | 49 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUN 21 | 09:05 | 11.0 | 80.6 | | 30 | 137 | | | | | | | | | | | | 154 | | | | DH59 |
| JUN 23 | 09:55 | 12.0 | 78.0 | | 50 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUN 25 | 08:55 | 16.0 | 83.0 | | 83 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUN 27 | 08:55 | 15.0 | 87.8 | | 102 | 137 | | | | | | | | | | | | 144 | | | | DH59 |
| JUN 28 | 11:00 | 18.0 | 85.1 | | 70 | 126 | | | | | | | | | | | | | | | | DH59 |
| JUN 29 | 09:15 | 18.0 | 82.2 | | 82 | 137 | | | | | | | | | | | | 139 | | | | DH59 |
| JUL 01 | 09:25 | 11.0 | 88.1 | Y | 178 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUL 03 | 09:10 | 15.0 | 78.0 | | 87 | 137 | | | | | | | | | | | | 132 | | | | DH59 |
| JUL 04 | 10:20 | 15.0 | 58.5 | | 54 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUL 05 | 09:15 | 17.0 | 36.6 | | 26 | 137 | | | | | | | | | | | | 188 | | | | DH59 |
| JUL 12 | 10:00 | 20.0 | 12.9 | | 32 | 137 | | | | | | | | | | | | | | | | DH59 |
| JUL 18 | 10:53 | 21.0 | 5.63 | | 12 | 137 | | | | | | | | | | | | 231 | | | | DH59 |
| JUL 25 | 09:30 | 20.0 | 3.24 | | 9 | 137 | | | | | | | | | | | | | | | | DH48 |
| JUL 25 | 17:00 | 20.0 | 3.63 | | 13 | MID X | | | | | | | | | | | | | | | | DH59 |
| JUL 31 | 11:30 | 19.0 | 6.85 | | 15 | 137 | | | | | | | | | | | | 251 | | | | DH59 |
| AUG 07 | 14:30 | 20.0 | 5.24 | | 40 | 137 | | | | | | | | | | | | | | | | DH59 |
| AUG 15 | 11:15 | 20.0 | 5.84 | | 13 | 137 | | | | | | | | | | | | 238 | | | | DH59 |
| AUG 22 | 09:40 | 16.0 | 3.80 | | 12 | 137 | | | | | | | | | | | | | | | | DH59 |
| AUG 28 | 09:40 | 12.0 | 3.41 | | 12 | 137 | | | | | | | | | | | | 238 | | | | DH59 |
| SEP 05 | 12:25 | 16.0 | 4.87 | | 9 | 137 | | | | | | | | | | | | 282 | | | | DH59 |
| SEP 12 | 10:10 | 11.0 | 5.41 | | 29 | 137 | | | | | | | | | | | | | | | | SURF |
| SEP 18 | 10:20 | 15.0 | 4.08 | | 15 | MID X | | | | | | | | | | | | | | | | DH59 |
| SEP 19 | 09:40 | 10.0 | 3.72 | | 39 | 137 | | | | | | | | | | | | 283 | | | | DH59 |
| SEP 24 | 14:20 | 11.0 | 8.19 | | 17 | 137 | | | | | | | | | | | | | | | | SURF |
| SEP 26 | 09:30 | 4.0 | 10.5 | | 13 | MID X | | | | | | | | | | | | 341 | | | | DH59 |
| SEP 28 | 09:30 | 5.0 | 10.5 | | 12 | 137 | | | | | | | | | | | | | | | | DH59 |
| OCT 03 | 09:55 | 11.0 | 12.9 | | 13 | 137 | | | | | | | | | | | | | | | | DH59 |
| OCT 10 | 09:45 | 12.0 | 15.8 | | 12 | 137 | | | | | | | | | | | | 348 | | | | DH59 |
| OCT 24 | 09:45 | 2.0 | 16.0 | W | 28 | 137 | | | | | | | | | | | | 236 | | | | DH48 |
| NOV 08 | 09:30 | 0.0 | 21.8 | W | 13 | MID X | | | | | | | | | | | | | | | | |

NOTE : SINGLE VERTICAL LOCATED AT 137 METRES

DISCHARGE SYMBOL(S): B - ICE CONDITIONS W - DAILY MEAN; ICE CONDITIONS Y - DAILY MEAN; ESTIMATED
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | | MINIMUM (mg/L) | | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | | TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-DEC | B-S | 2 310 | JUN 02 | | 5 | NOV 08 | | 173 000 | JUN 02 | | 3 180 000 | | 13 000 | 13 000 | --- |
| 1973 | JAN-DEC | B-C | 750 | MAY 19 | | 2 | JAN 08 | * | 18 700 | MAY 20 | | 159 000 | | 841 | 6 820 | 90.5 |
| 1974 | JAN-DEC | B-C | 1 750 | JUN 18 | | 4 | OCT 02 | | 103 000 | JUN 18 | | 1 710 000 | | 5 870 | 5 870 | 51.9 |
| 1975 | JAN-DEC | B-C | 7 860 | JUN 21 | * | 4 | AUG 26 | | 1 680 000 | JUN 21 | * | 5 760 000 | * | 33 500 | 11 000 | 44.2 |
| 1976 | JAN-DEC | M-C | 1 380 | MAY 11 | | 3 | SEP 23 | | 90 100 | AUG 07 | | 735 000 | | 2 980 | 8 420 | 43.5 |
| 1977 | JAN-DEC | M-C | 106 | JUN 13 | | 3 | JAN 05 | | 416 | JUN 11 | | 11 500 | | 40.8 | 7 860 | 47.0 |
| 1978 | JAN-DEC | M-C | 3 840 | MAY 19 | | 5 | JAN 24 | | 112 000 | MAY 19 | | 1 340 000 | | 5 480 | 7 510 | 41.8 |
| 1979 | JAN-OCT | M-S | 2 280 | MAY 26 | | 8 | AUG 01 | | 103 000 | MAY 26 | | 844 000 | | 3 860 | 7 080 | 39.0 |
| 1980 | MAR-NOV | M-S | 5 890 | MAY 27 | | 7 | AUG 27 | | 416 000 | MAY 27 | | 1 010 000 | | 4 100 | 8 730 | 38.5 |
| 1981 | MAR-NOV | M-S | 4 870 | MAY 23 | | 5 | SEP 07 | | 468 000 | MAY 23 | | 2 490 000 | | 10 100 | 7 080 | 31.4 |
| 1982 | MAR-NOV | M-S | 1 430 | MAY 29 | | 4 | MAR 08 | | 33 900 | MAY 29 | | 508 000 | | 2 070 | 8 810 | 31.1 |
| 1983 | MAR-OCT | M-S | 873 | MAY 28 | | 8 | APR 12 | | 22 400 | MAY 28 | | 136 000 | | 548 | 5 100 | 31.9 |
| 1984 | MAR-NOV | M-S | 304 | JUN 01 | | 5 | APR 01 | | 2 250 | JUN 01 | | 24 200 | | 88.3 | 5 840 | 32.8 |

B - BOTH AUTOMATIC AND MANUAL SAMPLING M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION NO. 05AA023

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 49 48 50 N LONG 114 11 00 W
DRAINAGE AREA: 1 440 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 1 844.48 TONNES FOR THE PERIOD APR 16 TO SEP 30

REMARKS:

| DAY | APR DAILY DISCHARGE (m³/s) | APR MEAN CONCENTRATION (mg/L) | APR DAILY LOAD (t) | MAY DAILY DISCHARGE (m³/s) | MAY MEAN CONCENTRATION (mg/L) | MAY DAILY LOAD (t) | JUN DAILY DISCHARGE (m³/s) | JUN MEAN CONCENTRATION (mg/L) | JUN DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.10 B | | | 4.62 | 4 | 1.53 | 27.4 | 14 S | 33.1 | 1 |
| 2 | 2.12 B | | | 4.60 | 3 S | 1.14 | 21.8 | 10 | 18.8 | 2 |
| 3 | 2.20 B | | | 4.81 | 3 | 1.19 | 20.8 | 8 S | 14.4 | 3 |
| 4 | 2.25 B | | | 4.50 | 3 S | 1.17 | 19.7 | 7 | 11.8 | 4 |
| 5 | 2.13 B | | | 4.82 | 3 | 1.20 | 20.1 | 8 S | 10.4 | 5 |
| 6 | 2.27 B | | | 4.82 | 3 S | 1.17 | 21.1 | 8 | 10.9 | 6 |
| 7 | 2.17 B | | | 4.44 | 3 | 1.15 | 24.2 | 8 | 10.5 | 7 |
| 8 | 2.17 B | | | 4.88 | 4 | 1.52 | 28.9 | 8 | 20.0 | 8 |
| 9 | 2.14 B | | | 7.33 | 8 | 3.80 | 35.5 | 11 | 33.7 | 9 |
| 10 | 2.15 B | | | 7.20 | 8 S | 3.11 | 32.2 | 11 | 30.5 | 10 |
| 11 | 2.13 B | | | 5.13 | 3 | 1.59 | 31.2 | 11 S | 29.7 | 11 |
| 12 | 1.96 B | | | 5.51 | 3 | 1.43 | 30.9 | 11 | 29.4 | 12 |
| 13 | 2.01 B | | | 5.70 | 4 S | 1.97 | 31.8 | 11 | 30.0 | 13 |
| 14 | 2.34 B | | | 8.22 | 19 | 13.5 | 31.6 | 11 | 30.0 | 14 |
| 15 | 3.24 | | | 16.4 | 48 S | 88.0 | 34.2 | 11 | 32.5 | 15 |
| 16 | 4.43 | 3 S | 1.15 | 31.6 | 134 S | 386 | 34.4 | 11 | 32.7 | 16 |
| 17 | 7.85 | 3 | 2.03 | 26.8 | 53 S | 123 | 32.6 | 11 | 31.0 | 17 |
| 18 | 8.24 | 5 S | 4.01 | 21.4 | 11 | 20.3 | 29.3 | 11 | 27.6 | 18 |
| 19 | 8.22 | 4 | 2.84 | 20.7 | 11 S | 19.7 | 27.3 | 12 S | 28.3 | 19 |
| 20 | 7.50 | 3 S | 1.94 | 23.5 | 11 | 22.3 | 27.5 | 13 | 30.9 | 20 |
| 21 | 7.05 | 3 | 1.83 | 19.5 | 9 | 15.2 | 28.5 | 15 S | 36.2 | 21 |
| 22 | 8.47 | 3 | 2.20 | 15.8 | 8 | 10.8 | 33.5 | 13 S | 37.8 | 22 |
| 23 | 7.40 | 3 S | 1.92 | 15.8 | 6 S | 8.09 | 32.6 | 12 | 33.4 | 23 |
| 24 | 6.01 | 3 | 1.56 | 14.7 | 5 | 8.35 | 31.8 | 10 | 27.5 | 24 |
| 25 | 5.24 | 4 | 1.81 | 13.2 | 5 | 5.70 | 31.1 | 8 S | 24.2 | 25 |
| 26 | 4.78 | 4 | 1.65 | 12.5 | 5 | 5.40 | 28.5 | 8 | 20.4 | 26 |
| 27 | 4.83 | 4 S | 1.67 | 11.8 | 6 | 8.17 | 27.8 | 8 | 19.2 | 27 |
| 28 | 4.50 | 4 | 1.56 | 12.3 | 6 | 8.38 | 28.0 | 7 S | 15.7 | /28 |
| 29 | 4.20 | 4 | 1.45 | 16.2 | 10 S | 14.0 | 24.3 | 5 | 12.6 | 29 |
| 30 | 4.21 | 4 | 1.45 | 32.4 | 15 | 42.0 | 23.1 | 7 | 14.0 | 30 |
| 31 | | | | 36.8 | 18 | 81.6 | | | | 31 |
| TOTAL | 137.36 | | 28.07 | 420.40 | | 836.66 | 851.7 | | 739.9 | TOTAL |

| DAY | JUL DAILY DISCHARGE (m³/s) | JUL MEAN CONCENTRATION (mg/L) | JUL DAILY LOAD (t) | AUG DAILY DISCHARGE (m³/s) | AUG MEAN CONCENTRATION (mg/L) | AUG DAILY LOAD (t) | SEP DAILY DISCHARGE (m³/s) | SEP MEAN CONCENTRATION (mg/L) | SEP DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 20.2 | 7 | 12.2 | 5.86 | 4 | 1.98 | 3.40 | 5 | 1.76 | 1 |
| 2 | 17.9 | 7 | 10.8 | 5.61 | 6 | 2.85 | 3.35 | 5 | 1.74 | 2 |
| 3 | 18.3 | 7 S | 9.85 | 5.72 | 6 | 2.97 | 3.29 | 5 | 1.71 | 3 |
| 4 | 14.8 | 7 | 8.01 | 5.38 | 6 | 2.78 | 3.25 | 7 | 1.97 | 4 |
| 5 | 14.6 | 7 | 8.83 | 5.35 | 6 S | 2.77 | 3.18 | 7 | 1.82 | 5 |
| 6 | 18.0 | 6 | 9.33 | 5.68 | 6 | 2.84 | 3.07 | 6 | 1.59 | 6 |
| 7 | 15.5 | 6 | 8.04 | 5.40 | 7 | 3.27 | 3.21 | 6 | 1.85 | 7 |
| 8 | 13.8 | 6 | 5.86 | 5.07 | 6 | 2.63 | 3.24 | 6 | 1.88 | 8 |
| 9 | 12.5 | 5 | 5.40 | 4.81 | 5 | 2.08 | 3.20 | 6 | 1.38 | 9 |
| 10 | 11.6 | 4 S | 4.01 | 4.67 | 5 | 2.02 | 3.18 | 6 | 1.37 | 10 |
| 11 | 10.9 | 4 | 3.77 | 4.58 | 5 | 1.97 | 3.18 | 6 | 1.38 | 11 |
| 12 | 10.4 | 4 | 3.59 | 4.45 | 5 | 1.92 | 3.34 | 5 | 1.44 | 12 |
| 13 | 10.1 | 3 | 2.62 | 4.45 | 6 | 2.31 | 3.23 | 5 | 1.40 | 13 |
| 14 | 9.55 | 3 | 2.48 | 4.34 | 6 | 2.25 | 3.19 | 5 | 1.38 | 14 |
| 15 | 8.91 | 3 | 2.31 | 4.20 | 6 | 2.18 | 3.14 | 6 | 1.38 | 15 |
| 16 | 8.52 | 3 | 2.21 | 4.08 | 6 | 2.10 | 3.06 | 5 | 1.32 | 16 |
| 17 | 8.08 | 3 S | 2.08 | 3.98 | 6 | 2.08 | 2.85 | 6 | 1.28 | 17 |
| 18 | 7.70 | 3 | 2.00 | 3.93 | 6 | 2.04 | 2.85 | 5 S | 1.23 | 18 |
| 19 | 7.48 | 3 S | 1.84 | 3.81 | 5 | 1.69 | 2.81 | 5 | 1.21 | 19 |
| 20 | 7.15 | 4 | 2.47 | 3.80 | 6 S | 1.88 | 2.83 | 5 | 1.27 | 20 |
| 21 | 7.28 | 3 | 1.89 | 3.80 | 5 | 1.94 | 3.80 | 5 | 1.58 | 21 |
| 22 | 7.39 | 3 | 1.92 | 3.89 | 4 | 1.28 | 3.88 | 5 | 1.92 | 22 |
| 23 | 8.71 | 4 | 2.32 | 3.69 | 4 | 1.24 | 3.50 | 5 | 1.61 | 23 |
| 24 | 8.36 | 4 | 2.20 | 3.53 | 4 | 1.22 | 3.31 | 5 | 1.38 | 24 |
| 25 | 8.08 | 4 | 2.10 | 3.60 | 5 | 1.81 | 3.30 | 5 | 1.43 | 25 |
| 26 | 8.80 | 4 | 2.04 | 3.40 | 5 | 1.78 | 3.28 | 5 | 1.41 | 26 |
| 27 | 8.67 | 4 | 2.03 | 3.34 | 5 | 1.73 | 3.10 | 5 | 1.34 | 27 |
| 28 | 8.31 | 4 | 2.18 | 3.77 | 5 | 1.95 | 3.83 | 5 | 1.32 | 28 |
| 29 | 8.10 | 3 | 1.88 | 3.88 | 5 | 1.91 | 3.03 | 5 | 1.31 | 29 |
| 30 | 8.35 | 3 | 1.85 | 3.48 | 5 | 1.50 | 3.23 | 5 | 1.40 | 30 |
| 31 | 8.08 | 4 | 2.08 | 3.44 | 5 | 1.49 | | | | 31 |
| TOTAL | 314.83 | | 130.82 | 134.37 | | 53.72 | 85.81 | | 44.31 | TOTAL |

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION NO. 05AA023

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 16 | 17:00 | 1.0 | 4.48 | 3 | 4.0 | | | | | | | | | | | | 200 | | | | DH59 |
| APR 18 | 16:50 | 7.0 | 6.82 | 5 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| APR 20 | 15:42 | 5.0 | 7.20 | 3 | 4.0 | | | | | | | | | | | | 185 | | | | DH59 |
| APR 23 | 11:00 | 4.5 | 7.33 | 3 | 4.0 | | | | | | | | | | | | 174 | | | | DH59 |
| APR 27 | 14:30 | 7.0 | 4.45 | 4 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 02 | 09:34 | 3.0 | 4.88 | 3 | 4.0 | | | | | | | | | | | | 210 | | | | DH59 |
| MAY 04 | 09:30 | 3.0 | 4.59 | 3 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 06 | 14:30 | 7.0 | 4.48 | 3 | 4.0 | | | | | | | | | | | | 216 | | | | DH59 |
| MAY 10 | 11:30 | 5.0 | 7.13 | 5 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 13 | 12:00 | 8.0 | 5.84 | 4 | 4.0 | | | | | | | | | | | | 202 | | | | DH59 |
| MAY 15 | 11:00 | 8.0 | 15.7 | 36 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 16 | 10:45 | 5.0 | 35.1 | 147 | 4.0 | | | | | | | | | | | | 150 | | | | DH59 |
| MAY 17 | 18:00 | 9.5 | 23.5 | 18 | 4.0 | | | | | | | | | | | | 145 | | | | DH59 |
| MAY 17 | 19:01 | 9.5 | 23.5 | 15 | 4.0 | | | | | | | | | | | | 145 | | | | DH59 |
| MAY 18 | 18:00 | 7.0 | 20.1 | 11 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 23 | 16:40 | 9.0 | 15.4 | 5 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 25 | 17:00 | 12.5 | 15.8 | 12 | 4.0 | | | | | | | | | | | | 135 | | | | DH59 |
| JUN 01 | 14:30 | 7.0 | 26.4 | 13 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 03 | 14:50 | 9.5 | 19.9 | 7 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 05 | 19:00 | 12.0 | 18.8 | 8 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 11 | 16:35 | 12.0 | 30.5 | 11 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 19 | 08:30 | 8.0 | 27.5 | 12 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 21 | 10:00 | 8.0 | 29.0 | 15 | 4.0 | | | | | | | | | | | | 149 | | | | DH59 |
| JUN 22 | 17:00 | 11.0 | 32.9 | 12 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 25 | 13:00 | 10.5 | 31.2 | 9 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 28 | 20:00 | 15.0 | 25.0 | 6 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| JUL 03 | 17:00 | 15.0 | 18.1 | 9 | 4.0 | | | | | | | | | | | | 165 | | | | DH59 |
| JUL 03 | 17:01 | 15.0 | 18.1 | 5 | 4.0 | | | | | | | | | | | | 159 | | | | DH59 |
| JUL 10 | 10:50 | 9.0 | 11.8 | 4 | 4.0 | | | | | | | | | | | | 166 | | | | DH59 |
| JUL 17 | 10:00 | 14.0 | 8.09 | 1 | 4.0 | | | | | | | | | | | | 185 | | | | DH59 |
| JUL 17 | 10:01 | 14.0 | 8.09 | 4 C | 4.0 | | | | | | | | | | | | 184 | | | | DH59 |
| JUL 18 | 18:00 | 18.0 | 7.45 | 3 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| AUG 25 | 18:00 | 18.0 | 5.38 | 8 | 4.0 | | | | | | | | | | | | | | | | DH59 |
| SEP 18 | 15:42 | 12.0 | 2.84 | 5 | 4.0 | | | | | | | | | | | | 203 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT 4 METRES

CONCENTRATION SYMBOL(S): C - ORGANIC MATERIAL PRESENT

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION NO. 05AA023

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | MAY-NOV # | M-MS | 2 520 | JUN 21 * | 1 | AUG 12 | --- | | --- | | --- | --- | --- |
| 1976 | APR-DEC | M-S | 185 | AUG 08 | 0 | OCT 28 * | 15 100 | AUG 06 * | 39 500 | | --- | --- | --- |
| 1977 | JAN-DEC | M-C | 51 | APR 05 | C | JAN 05 | 96.6 | MAY 11 | 1 380 | | 5.40 | 5.40 | --- |
| 1978 | JAN-DEC | M-C | 220 | MAR 30 | 1 | DEC 11 | 887 | MAY 22 | 17 000 | | 59.1 | 37.3 | 85.4 |
| 1979 | JAN-OCT | M-S | 138 | MAY 27 | 0 | JUL 17 | 1 100 | MAY 27 | 7 810 | | 30.8 | 35.1 | 82.7 |
| 1980 | MAR-NOV # | M-S | 103 | MAY 26 | 0 | APR 02 | 577 | APR 30 | 6 270 | | 25.6 | 32.8 | 40.6 |
| 1981 | MAR-OCT | M-S | 705 | MAY 26 | 1 | OCT 14 | 11 100 | MAY 26 | 53 400 | * | 259 | 76.0 | 89.5 |
| 1982 | APR-SEP | M-S | 43 | MAY 26 | 1 | JUL 26 | 241 | JUN 16 | 4 010 | | --- | --- | --- |
| 1983 | APR-OCT | M-S | 80 | MAY 26 | 1 | SEP 26 | 229 | MAY 26 | 2 180 | | --- | --- | --- |
| 1984 | APR-SEP | M-S | 147 | MAY 16 | 1 | JUL 17 | 386 | MAY 16 | 1 840 | | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PADDLE RIVER AT BARRHEAD - STATION NO. 07BB005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | APR-MAY # | M-MS | 331 | APR 24 | 75 | MAY 05 | --- | --- | --- | --- | --- |
| 1976 | APR-MAY # | M-MS | 481 | APR 09 * | 6 | MAY 20 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PADDLE RIVER NEAR ROCKFORT BRIDGE - STATION NO. 07BB004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | JUL-OCT # | M-MS | 422 JUL 14 | | 10 OCT 31 | | --- | --- | --- | --- | --- |
| 1975 | APR-SEP # | M-MS | 1 270 MAY 05 | | 5 JUN 17 | * | --- | --- | --- | --- | --- |
| 1976 | APR-SEP # | M-MS | 862 APR 06 | | 5 MAY 20 | | --- | --- | --- | --- | --- |
| 1977 | APR-SEP # | M-MS | 880 MAY 30 | | 11 JUN 23 | | --- | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 1 430 JUN 15 | | 18 AUG 28 | | --- | --- | --- | --- | --- |
| 1979 | APR-OCT # | M-MS | 1 800 APR 24 | * | 6 AUG 20 | | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 918 JUN 26 | | 16 OCT 14 | | --- | --- | --- | --- | --- |
| 1981 | APR-OCT # | M-MS | 78 APR 21 | | 10 JUL 06 | | --- | --- | --- | --- | --- |
| 1982 | JUL-NOV # | M-MS | 406 JUL 07 | | 23 NOV 02 | | --- | --- | --- | --- | --- |
| 1983 | JUN-SEP # | M-MS | 218 JUN 28 | | 23 SEP 21 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PEACE RIVER AT DUNVEGAN BRIDGE - STATION NO. 07FD003

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUG 22 | 09:30 | 13.0 | 1360 | 35 | MID | | | | | | | | | | | | 131 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

PEACE RIVER AT DUNVEGAN BRIDGE - STATION NO. 07FD003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAY-OCT MEAN LOAD (TONNES) | SUMMARY : MAY-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAY-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-OCT # | M-S | 2 470 MAY 27 | | 10 OCT 21 | * | 472 000 MAY 27 | * | 5 270 000 | * | 32 300 | 32 300 | --- |
| 1978 | APR-AUG # | M-MS | 894 MAY 06 | | 117 APR 30 | | --- | | --- | | --- | --- | --- |
| 1977 | JUN-AUG # | M-MS | 4 730 JUN 13 | * | 130 AUG 18 | | --- | | --- | | --- | --- | --- |
| 1979 | MAY-SEP # | M-MS | 242 MAY 23 | | 221 SEP 13 | | --- | | --- | | --- | --- | --- |
| 1980 | OCT-OCT | M-MS | 115 OCT 15 | | 115 OCT 15 | | --- | | --- | | --- | --- | --- |
| 1981 | OCT-OCT | M-MS | 23 OCT 22 | | 23 OCT 22 | | --- | | --- | | --- | --- | --- |
| 1982 | JUN-JUN | M-MS | 95 JUN 22 | | 95 JUN 22 | | --- | | --- | | --- | --- | --- |
| 1983 | SEP-SEP | M-MS | 12 SEP 16 | | 12 SEP 16 | | --- | | --- | | --- | --- | --- |
| 1984 | AUG-AUG | M-MS | 35 AUG 22 | | 35 AUG 22 | | --- | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PEACE RIVER AT PEACE POINT - STATION NO. 07KC001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 25 | 11:50 | 1.0 | 2440 | 358 | 351 | | | | | | | | | | | | | 140 | | | | P81 |
| MAY 23 | 12:15 | 7.0 | 4780 | 1240 | 351 | | | | | | | | | | | | | 158 | | | | P81 |
| JUN 15 | 14:15 | 12.0 | 8320 | 3320 | 351 | | 32 | 44 | 62 | 73 | 86 | 95 | 98 | 100 | | | | 203 | 5 | 51 | 44 | P81 |
| JUN 22 | 12:00 | 14.0 | 4070 | 807 | 351 | | | | | | | | | | | | | 158 | | | | P81 |
| AUG 23 | 12:20 | 14.0 | 1810 | 99 | 503 | X | | | | | | | | | | | | 132 | | | | P81 |
| AUG 27 | 11:40 | 8.0 | 1830 | 85 | 503 | X | | | | | | | | | | | | 147 | | | | DIP |
| AUG 27 | 13:05 | 8.0 | 1830 | 48 | 503 | X | | | | | | | | | | | | 148 | | | | DIP |
| AUG 27 | 13:55 | 8.0 | 1830 | 31 | WELB | X | | | | | | | | | | | | 155 | | | | DIP |
| OCT 03 | 15:15 | 4.0 | 2480 | 183 | 503 | X | | | | | | | | | | | | 128 | | | | P81 |
| OCT 03 | 16:00 | 4.0 | 2450 | 158 | WELB | X | | | | | | | | | | | | 146 | | | | DIP |
| OCT 18 | 12:10 | 7.0 | 3530 | 390 | 503 | X | | | | | | | | | | | | 123 | | | | P81 |

NOTE : SINGLE VERTICAL LOCATED AT 351 METRES

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

PEACE RIVER AT PEACE POINT - STATION NO. 07KC001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | | | MINIMUM (mg/L) | | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | | TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAY-SEP MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | MAY-SEP | M-S | 2 080 | MAY 24 | | 30 | SEP 21 | | 2 240 000 | JUN 07 | | 47 800 000 | * | --- | --- | --- |
| 1968 | MAY-SEP | M-S | 4 490 | JUN 20 | * | 83 | SEP 08 | | 3 470 000 | JUN 19 | | 21 700 000 | | 142 000 | 142 000 | --- |
| 1969 | MAY-SEP | M-S | 1 030 | MAY 15 | | 135 | JUL 04 | | 582 000 | MAY 07 | | 14 100 000 | | 82 400 | 117 000 | 21.2 |
| 1970 | FEB-OCT # | M-MS | 807 | MAY 08 | | 62 | FEB 23 | | --- | | | --- | | --- | --- | --- |
| 1971 | JUN-SEP | M-S | 3 810 | JUN 23 | | 34 | SEP 30 | | 2 570 000 | JUN 22 | * | 35 800 000 | | --- | --- | --- |
| 1972 | JAN-NOV # | M-MS | 3 030 | JUN 22 | | 14 | NOV 29 | * | --- | | | --- | | --- | --- | --- |
| 1973 | FEB-OCT # | M-MS | 1 180 | MAY 10 | | 27 | MAR 27 | | --- | | | --- | | --- | --- | --- |
| 1974 | MAY-OCT # | M-MS | 2 190 | MAY 08 | | 51 | SEP 26 | | --- | | | --- | | --- | --- | --- |
| 1975 | JUN-JUN # | M-MS | 273 | JUN 03 | | 261 | JUN 28 | | --- | | | --- | | --- | --- | --- |
| 1976 | JUN-OCT # | M-MS | 1 410 | JUL 14 | | 138 | SEP 17 | | --- | | | --- | | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 393 | MAY 05 | | 108 | OCT 26 | | --- | | | --- | | --- | --- | --- |
| 1978 | MAY-JUL # | M-MS | 1 050 | MAY 12 | | 235 | JUL 19 | | --- | | | --- | | --- | --- | --- |
| 1979 | JUN-SEP # | M-MS | 825 | JUN 21 | | 105 | SEP 21 | | --- | | | --- | | --- | --- | --- |
| 1980 | MAY-OCT # | M-MS | 1 420 | JUN 27 | | 48 | OCT 21 | | --- | | | --- | | --- | --- | --- |
| 1981 | MAY-NOV # | M-MS | 950 | MAY 19 | | 35 | SEP 14 | | --- | | | --- | | --- | --- | --- |
| 1982 | MAY-SEP # | M-MS | 3 230 | AUG 16 | | 74 | SEP 30 | | --- | | | --- | | --- | --- | --- |
| 1983 | JUN-NOV # | M-MS | 244 | JUN 13 | | 67 | NOV 03 | | --- | | | --- | | --- | --- | --- |
| 1984 | APR-OCT | M-MS | 2 320 | JUN 15 | | 31 | AUG 27 | | --- | | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PEACE RIVER AT PEACE RIVER - STATION NO. 07HA001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | | INSTANT. CONCENT. (mg/L) | | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 15 | 14:35 | 0.0 | 858 | S | 22 | | 210 | | | | | | | | | | | | 178 | | | | D74 |
| APR 25 | 13:45 | 8.0 | 1800 | | 201 | | MID | | | | | | | | | | | | 171 | | | | D74 |
| APR 30 | 11:35 | 8.0 | 1820 | | 115 | | MID | | | | | | | | | | | | | | | | D74 |
| APR 30 | 17:21 | 8.0 | 1800 | | 91 | | MID | | | | | | | | | | | | 169 | | | | D74 |
| MAY 01 | 11:01 | 8.0 | 1870 | | 123 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 01 | 17:22 | 8.0 | 1730 | | 105 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 02 | 12:10 | 7.0 | 1880 | | 136 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 03 | 17:31 | 8.0 | 1840 | | 120 | | MID | | | | | | | | | | | | 158 | | | | D74 |
| MAY 04 | 11:17 | 7.0 | 1880 | | 125 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 04 | 17:21 | 7.0 | 1880 | | 113 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 07 | 11:31 | 8.0 | 2000 | | 165 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 07 | 17:15 | 8.0 | 2010 | | 130 | | MID | | | | | | | | | | | | 182 | | | | D74 |
| MAY 08 | 11:53 | 7.0 | 1880 | | 195 | | MID | | | | | | | | | | | | 164 | | | | D74 |
| MAY 08 | 17:38 | 7.0 | 1880 | | 172 | | MID | | | | | | | | | | | | 162 | | | | D74 |
| MAY 09 | 07:25 | 8.0 | 1820 | | 132 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 09 | 14:43 | 8.0 | 1910 | | 123 | | MID | | | | | | | | | | | | 158 | | | | D74 |
| MAY 11 | 07:37 | 7.0 | 1930 | | 111 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 11 | 14:31 | 8.0 | 1940 | | 98 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 12 | 17:31 | 8.0 | 2260 | | 636 | | MID | 28 | 35 | 52 | 60 | 78 | 87 | 93 | 99 | 100 | | | 192 | 13 | 52 | 35 | D74 |
| MAY 13 | 11:37 | 7.0 | 2180 | | 901 | | MID | | | | | | | | | | | | 174 | | | | D74 |
| MAY 14 | 11:10 | 8.0 | 2060 | | 502 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 14 | 14:48 | 8.0 | 2030 | | 508 | | MID | | | | | | | | | | | | | | | | D74 |
| MAY 15 | 11:11 | 8.0 | 1970 | | 374 | | MID | | | | | | | | | | | | 185 | | | | D74 |
| MAY 15 | 14:48 | 8.0 | 1970 | | 315 | | MID | | | | | | | | | | | | 185 | 12 | 45 | 43 | D74 |
| MAY 15 | 15:15 | 10.0 | 1970 | | 331 | | MID | 40 | 43 | 52 | 58 | 82 | 88 | 93 | 99 | 100 | | | 181 | | | | D74 |
| MAY 16 | 11:10 | 7.0 | 2140 | | 286 | | MID | | | | | | | | | | | | 157 | | | | D74 |
| MAY 16 | 14:37 | 7.0 | 2230 | | 232 | | MID | | | | | | | | | | | | 154 | | | | D74 |
| JUN 04 | 10:30 | 11.5 | 2330 | | 268 | | MID | | | | | | | | | | | | 178 | | | | D74 |
| JUL 12 | 10:05 | | 2900 | | 467 | | MID | | | | | | | | | | | | 178 | | | | D74 |
| JUL 13 | 17:30 | | 2780 | | 339 | | MID | | | | | | | | | | | | 128 | | | | D74 |
| JUL 20 | 17:00 | | 2820 | | 82 | | MID | | | | | | | | | | | | | | | | D74 |
| AUG 21 | 15:30 | 15.5 | 1510 | | 22 | | MID | | | | | | | | | | | | | | | | D74 |
| AUG 30 | 14:25 | 13.5 | 1780 | | 39 | | MID | | | | | | | | | | | | | | | | D74 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): S - ICE CONDITIONS

PEACE RIVER AT PEACE RIVER - STATION NO. 07HA001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | | MINIMUM (mg/L) | | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | | TOTAL FOR PERIOD (TONNES) | | SUMMARY : JAN-DEC MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1966 | JUN-OCT | M-S | 3 800 | AUG 30 | | 16 | OCT 25 | | 1 080 000 | AUG 30 | | 12 800 000 | | --- | --- | --- |
| 1967 | MAY-DEC | M-S | 2 210 | MAY 18 | | 10 | SEP 18 | | 1 440 000 | JUN 04 | | 31 800 000 | | --- | --- | --- |
| 1968 | JAN-OCT # | M-S | 7 080 | JUN 14 | | 33 | JAN 05 | | 3 600 000 | JUN 14 | | 18 700 000 | | --- | --- | --- |
| 1969 | JAN-DEC # | M-S | 4 800 | MAY 01 | | 11 | DEC 10 | | 1 630 000 | MAY 02 | | 12 800 000 | | --- | --- | --- |
| 1970 | JAN-DEC | M-C | 2 670 | APR 18 | | 6 | SEP 21 | | 827 000 | JUN 05 | | 15 800 000 | | 45 100 | 45 100 | --- |
| 1971 | JAN-DEC | M-C | 6 830 | JUN 16 | | 9 | NOV 16 | | 5 340 000 | JUN 18 | | 58 100 000 | | 159 000 | 102 000 | 55.8 |
| 1972 | JAN-DEC | M-C | 8 090 | JUN 15 | | 3 | MAR 17 | | 14 600 000 | JUN 14 | * | 76 300 000 | * | 208 000 | 137 000 | 35.2 |
| 1973 | JAN-DEC | M-C | 3 300 | APR 13 | | 3 | SEP 11 | * | 1 120 000 | APR 14 | | 31 600 000 | | 86 200 | 125 000 | 0.0 |
| 1974 | JAN-DEC | M-C | 5 310 | APR 23 | | 13 | NOV 02 | | 4 030 000 | APR 25 | | 58 000 000 | | 162 000 | 132 000 | 0.0 |
| 1975 | JAN-DEC | M-C | 2 220 | JUL 02 | | 7 | FEB 20 | | 1 370 000 | JUL 01 | | 15 800 000 | | 46 000 | 118 000 | 0.0 |
| 1976 | JAN-DEC | M-C | 5 000 | AUG 19 | | 10 | JAN 23 | | 3 230 000 | AUG 19 | | 51 900 000 | | 142 000 | 121 000 | 0.0 |
| 1977 | JAN-DEC | M-C | 6 380 | JUN 11 | | 20 | FEB 08 | | 3 250 000 | JUN 11 | | 42 400 000 | | 116 000 | 121 000 | 0.0 |
| 1978 | FEB-DEC # | M-S | 3 020 | JUL 13 | | 2 | SEP 05 | | 784 000 | JUN 17 | | 11 100 000 | | --- | --- | --- |
| 1979 | MAR-NOV # | M-S | 4 180 | MAY 18 | | 10 | MAR 29 | | 1 430 000 | MAY 18 | | 33 200 000 | | --- | --- | --- |
| 1980 | MAR-OCT # | M-S | 2 530 | JUN 09 | | 7 | MAR 13 | | 1 890 000 | JUN 08 | | 17 300 000 | | --- | --- | --- |
| 1981 | JAN-OCT # | M-S | 7 410 | MAY 05 | | 12 | JAN 27 | | 1 670 000 | MAY 05 | | 18 300 000 | | --- | --- | --- |
| 1982 | MAR-NOV # | M-S | 9 140 | AUG 04 | * | 25 | NOV 01 | | 4 780 000 | JUL 17 | | 40 300 000 | | --- | --- | --- |
| 1983 | MAY-OCT # | M-S | 4 840 | JUN 22 | | 24 | SEP 23 | | 1 890 000 | JUL 17 | | 28 100 000 | | --- | --- | --- |
| 1984 | MAR-AUG | M-MS | 901 | MAY 13 | | 22 | MAR 15 | | --- | | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PEIGAN CREEK NEAR PAKOWKI ROAD - STATION NO. 05AH041

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | MAR-MAY # | M-MS | 302 | MAR 19 | 9 | MAY 10 * | --- | --- | --- | --- | --- |
| 1976 | MAR-JUL # | M-MS | 393 | APR 05 | 4 | MAY 30 | --- | --- | --- | --- | --- |
| 1978 | MAR-MAY # | M-MS | 441 | MAR 15 * | 10 | MAY 02 | --- | --- | --- | --- | --- |
| 1980 | MAR-APR # | M-MS | 31 | MAR 25 | 18 | APR 09 | --- | --- | --- | --- | --- |
| 1981 | MAR-MAR | M-MS | 32 | MAR 10 | 23 | MAR 10 | --- | --- | --- | --- | --- |
| 1982 | JUN-JUN | M-MS | 127 | JUN 04 | 127 | JUN 04 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PEKISKO CREEK NEAR LONGVIEW - STATION NO. 05BL023

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | APR-MAY # | M-MS | 1 280 | MAY 25 * | 17 | APR 11 | --- | --- | --- | --- | --- |
| 1976 | MAY-MAY | M-MS | 21 | MAY 13 | 21 | MAY 13 | --- | --- | --- | --- | --- |
| 1977 | MAY-MAY # | M-MS | 13 | MAY 17 | 11 | MAY 24 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PEMBINA RIVER AT JARVIE - STATION NO. 07EC002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 08 | 12:00 | 5.0 | 44.5 | 176 | MID | | | | | | | | | | | | 166 | | | | DH59 |
| JUN 11 | 14:40 | 18.0 | 79.2 | 426 | MID | 9 | 19 | 37 | 62 | 71 | 78 | 76 | 89 | 99 | 100 | | 242 | 24 | 57 | 19 | DH59 |
| JUL 03 | 15:00 | 18.0 | 21.8 | 36 | MID | | | | | | | | | | | | 184 | | | | DH48 |
| JUL 03 | 16:01 | 18.0 | 21.8 | 28 | MID | | | | | | | | | | | | 166 | | | | DH48 |
| JUL 31 | 14:15 | 18.0 | 8.08 | 4 | MID | | | | | | | | | | | | 226 | | | | DH48 |
| JUL 31 | 14:15 | 18.0 | 8.08 | 4 | MID | | | | | | | | | | | | 230 | | | | DH48 |
| SEP 04 | 10:00 | | 4.20 | 3 | MID | | | | | | | | | | | | 231 | | | | DIP |
| SEP 04 | 10:01 | | 4.20 | 3 | MID | | | | | | | | | | | | 229 | | | | DIP |
| OCT 09 | 10:25 | 8.0 | 33.2 | 83 | MID | | | | | | | | | | | | 155 | | | | DH59 |
| OCT 09 | 10:26 | 8.0 | 33.2 | 85 | MID | | | | | | | | | | | | 150 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

PEMBINA RIVER AT JARVIE - STATION NO. 07BC002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-SEP # | M-MS | 536 | APR 14 | 19 | SEP 24 | --- | --- | --- | --- | --- |
| 1977 | APR-SEP # | M-MS | 2 120 | MAY 11 | 60 | SEP 28 | --- | --- | --- | --- | --- |
| 1978 | APR-NOV # | M-MS | 812 | JUN 18 | 31 | AUG 31 | --- | --- | --- | --- | --- |
| 1979 | APR-SEP # | M-MS | 1 800 | APR 25 | 11 | SEP 19 | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 2 500 | APR 17 * | 41 | OCT 17 | --- | --- | --- | --- | --- |
| 1981 | APR-OCT # | M-MS | 223 | APR 10 | 4 | OCT 05 | --- | --- | --- | --- | --- |
| 1982 | JUN-AUG # | M-MS | 439 | AUG 30 | 320 | JUN 11 | --- | --- | --- | --- | --- |
| 1983 | MAY-OCT # | M-MS | 1 030 | MAY 09 | 11 | OCT 31 | --- | --- | --- | --- | --- |
| 1984 | MAY-OCT | M-MS | 436 | JUN 11 | 3 | SEP 04 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PEMBINA RIVER NEAR ENTWISTLE - STATION NO. 07BB002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 10 | 14:30 | 0.5 | 12.3 | 26 | MID | | | | | | | | | | | | 194 | | | | DH59 |
| JUL 04 | 11:10 | 17.0 | 12.3 | 8 | 32.0 | | | | | | | | | | | | 170 | | | | DH48 |
| JUL 30 | 14:15 | 23.0 | 3.74 | 8 | MID | | | | | | | | | | | | 185 | | | | DH48 |
| SEP 10 | 15:00 | 10.0 | 22.5 | 46 | 20.0 | | | | | | | | | | | | 200 | | | | --- |

NOTE : SINGLE VERTICAL IS UNDETERMINED

PEMBINA RIVER NEAR ENTWISTLE - STATION NO. 07BB002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | JUL-OCT # | M-MS | 17 | JUL 23 | 2 | OCT 29 * | --- | --- | --- | --- | --- |
| 1975 | MAY-SEP # | M-MS | 51 | MAY 15 | 3 | AUG 19 | --- | --- | --- | --- | --- |
| 1976 | APR-AUG # | M-MS | 23 | AUG 19 | 7 | JUL 19 | --- | --- | --- | --- | --- |
| 1977 | MAY-SEP # | M-MS | 128 | MAY 09 | 10 | JUN 23 | --- | --- | --- | --- | --- |
| 1978 | MAY-AUG # | M-MS | 333 | JUN 18 | 8 | AUG 21 | --- | --- | --- | --- | --- |
| 1979 | JUN-SEP # | M-MS | 11 | JUN 11 | 6 | AUG 13 | --- | --- | --- | --- | --- |
| 1980 | APR-AUG # | M-MS | 353 | APR 14 * | 10 | AUG 18 | --- | --- | --- | --- | --- |
| 1981 | APR-AUG # | M-MS | 159 | MAY 11 | 8 | JUL 05 | --- | --- | --- | --- | --- |
| 1982 | JUN-OCT # | M-MS | 78 | JUL 26 | 2 | SEP 27 | --- | --- | --- | --- | --- |
| 1983 | APR-OCT # | M-MS | 198 | JUN 27 | 2 | SEP 28 | --- | --- | --- | --- | --- |
| 1984 | APR-SEP | M-MS | 46 | SEP 10 | 6 | JUL 04 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PINCHER CREEK AT PINCHER CREEK - STATION NO. 05AA004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-JUN # | M-MS | 2 050 | MAY 25 * | 37 | MAR 24 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PINE CREEK NEAR GRASSLAND - STATION NO. 07CA005

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 03 | 09:25 | 5.0 | 0.126 | 18 | MID | | | | | | | | | | | | 339 | | | | DH48 |
| JUN 07 | 08:10 | 10.0 | 3.15 | 45 | MID | | | | | | | | | | | | 292 | | | | DH59 |
| JUL 04 | 10:30 | 18.0 | 0.040 E | 17 | MID | | | | | | | | | | | | 318 | | | | DIP |
| AUG 01 | 10:05 | 20.0 | 0.040 E | 16 | MID | | | | | | | | | | | | 435 | | | | DIP |
| SEP 06 | 08:00 | 8.0 | 0.030 E | 8 | MID | | | | | | | | | | | | 543 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): E - ESTIMATED

PINE CREEK NEAR GRASSLAND - STATION NO. 07CA005

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | AUG-SEP # | M-MS | 51 | AUG 13 | 48 | SEP 17 | --- | --- | --- | --- | --- |
| 1975 | APR-SEP # | M-MS | 198 | APR 21 | 15 | APR 15 | --- | --- | --- | --- | --- |
| 1976 | APR-OCT # | M-MS | 683 | APR 12 * | 9 | JUN 15 | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 54 | JUN 07 | 21 | AUG 10 | --- | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 206 | JUN 02 | 41 | JUN 27 | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 118 | MAY 02 | 15 | OCT 31 | --- | --- | --- | --- | --- |
| 1980 | APR-SEP # | M-MS | 93 | SEP 25 | 23 | JUN 04 | --- | --- | --- | --- | --- |
| 1981 | APR-SEP # | M-MS | 85 | APR 21 | 5 | SEP 29 * | --- | --- | --- | --- | --- |
| 1982 | JUN-AUG # | M-MS | 35 | AUG 04 | 13 | JUN 07 | --- | --- | --- | --- | --- |
| 1983 | AUG-AUG | M-MS | 20 | AUG 09 | 20 | AUG 09 | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 45 | JUN 07 | 5 | SEP 06 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PIPESTONE RIVER NEAR LAKE LOUISE - STATION NO. 05BA002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | TOTAL FOR PERIOD (TONNES) | SUMMARY : MAY-AUG MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | JUN-AUG # | M-MS | 74 | JUL 08 * | 3 | AUG 05 | --- | | --- | --- | --- | --- |
| 1973 | MAY-AUG | M-S | 73 | JUN 24 | 1 | JUL 25 * | 260 | JUN 24 * | 1 870 * | 12.8 | 12.8 | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PIYAMI DRAIN NEAR PICTURE BUTTE - STATION NO. 05AD037

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | SAMPLED CONCENTRATION MINIMUM (mg/L) | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|
| 1978 | JUL-JUL | M-MS | 247 JUL 11 * | 247 JUL 11 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

PONTON RIVER ABOVE BOYER RIVER - STATION NO. 07JF003

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 04 | 09:00 | 8.5 | 4.67 | 27 | MID | | | | | | | | | | | | 145 | | | | DH48 |
| MAY 25 | 11:20 | 9.5 | 15.0 | 139 | MID | | | | | | | | | | | | 128 | | | | DH59 |
| JUN 21 | 18:30 | | 26.2 | 283 | MID | | | | | | | | | | | | 122 | | | | DH59 |
| JUL 04 | 17:20 | 12.0 | 127 | 5070 | MID | 25 | 32 | 50 | 63 | 82 | 93 | 95 | 98 | 100 | | | 274 | 7 | 61 | 32 | DH59 |
| AUG 01 | 13:35 | 22.0 | 14.1 | 148 | MID | | | | | | | | | | | | 141 | | | | DH59 |
| AUG 29 | 16:40 | 9.0 | 39.2 | 843 | MID | 39 | 45 | 68 | 80 | 91 | 96 | 97 | 99 | 100 | | | 191 | 5 | 50 | 45 | DH59 |
| SEP 25 | 15:10 | 4.0 | 13.0 | 100 | MID | | | | | | | | | | | | 169 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

PONTON RIVER ABOVE BOYER RIVER - STATION NO. 07JF003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | SAMPLED CONCENTRATION MINIMUM (mg/L) | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|
| 1975 | APR-MAY # | M-MS | 1 880 APR 29 | 38 APR 22 | --- | --- | --- | --- | --- |
| 1976 | APR-OCT # | M-MS | 3 420 APR 28 | 19 OCT 27 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 1 050 APR 28 | 13 OCT 05 | --- | --- | --- | --- | --- |
| 1978 | MAY-OCT # | M-MS | 459 MAY 09 | 20 AUG 03 | --- | --- | --- | --- | --- |
| 1979 | MAY-NOV # | M-MS | 2 200 MAY 18 | 7 SEP 27 | --- | --- | --- | --- | --- |
| 1980 | JUN-AUG # | M-MS | 50 JUL 03 | 5 AUG 08 * | --- | --- | --- | --- | --- |
| 1981 | MAY-OCT # | M-MS | 393 MAY 27 | 7 SEP 08 | --- | --- | --- | --- | --- |
| 1982 | MAY-OCT # | M-MS | 2 740 MAY 04 | 8 AUG 25 | --- | --- | --- | --- | --- |
| 1983 | MAY-OCT # | M-MS | 321 MAY 05 | 8 SEP 01 | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 5 070 JUL 04 * | 27 MAY 04 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

POPLAR CREEK NEAR FORT MCMURRAY - STATION NO. 07DA007

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 25 | 13:10 | 13.0 | 0.899 | 25 | MID | | | | | | | | | | | | 248 | | | | DH48 |
| JUN 25 | 17:30 | 16.0 | 2.80 | 51 | 9.0 | | | | | | | | | | | | 278 | | | | DH48 |
| AUG 07 | 14:50 | 21.0 | 0.635 | 11 | 8.0 | | | | | | | | | | | | 208 | | | | DH48 |
| SEP 17 | 16:00 | 13.0 | 0.279 | 18 | 13.0 | | | | | | | | | | | | 232 | | | | DH48 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

ALBERTA

POPLAR CREEK NEAR FORT MCMURRAY - STATION NO. 07DA007

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : APR-OCT MEAN LOAD (TONNES) | SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : APR-OCT HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | OCT-OCT | M-MS | 4 | OCT 07 | 4 | OCT 07 | --- | | --- | | --- | --- | --- |
| 1975 | APR-AUG # | M-MS | 353 | MAY 28 | 22 | JUN 02 | --- | | --- | | --- | --- | --- |
| 1976 | JAN-DEC | M-C | 542 | APR 08 * | 5 | NOV 05 | 383 | AUG 30 | 2 540 | | 11.8 | 11.8 | --- |
| 1977 | APR-OCT | M-S | 71 | APR 20 | 5 | SEP 19 | 28.5 | APR 20 | 595 | | 3.27 | 7.54 | 56.8 |
| 1978 | APR-OCT | M-S | 397 | SEP 13 | 5 | AUG 04 | 521 | SEP 13 * | 4 330 * | | 20.2 | 11.8 | 41.4 |
| 1979 | APR-OCT # | M-MS | 138 | APR 23 | 10 | OCT 19 | --- | | --- | | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 54 | APR 21 | 5 | OCT 30 | --- | | --- | | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 31 | MAY 25 | 13 | AUG 26 | --- | | --- | | --- | --- | --- |
| 1982 | JUN-SEP # | M-MS | 8 | JUN 21 | 3 | SEP 19 * | --- | | --- | | --- | --- | --- |
| 1983 | APR-AUG # | M-MS | 18 | APR 29 | 5 | AUG 03 | --- | | --- | | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 51 | JUN 25 | 11 | AUG 07 | --- | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

PRAIRIE RIVER NEAR LAKE CLAIRE - STATION NO. 07KF014

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | JUL-SEP # | M-MS | 405 | AUG 04 | 70 | AUG 19 | --- | --- | --- | --- | --- |
| 1972 | AUG-AUG # | M-MS | 30 | AUG 01 | 13 | AUG 22 * | --- | --- | --- | --- | --- |
| 1976 | MAY-OCT # | M-MS | 382 | MAY 19 | 81 | SEP 14 | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 885 | MAY 30 * | 37 | JUL 28 | --- | --- | --- | --- | --- |
| 1978 | JUN-OCT # | M-MS | 311 | JUL 27 | 32 | AUG 22 | --- | --- | --- | --- | --- |
| 1979 | JUN-SEP # | M-MS | 117 | JUL 18 | 39 | AUG 18 | --- | --- | --- | --- | --- |
| 1980 | JUN-JUL # | M-MS | 105 | JUL 24 | 25 | JUL 14 | --- | --- | --- | --- | --- |
| 1981 | JUN-AUG # | M-MS | 138 | JUN 09 | 40 | AUG 07 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

RACEHORSE CREEK NEAR THE MOUTH - STATION NO. 08AA027

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-JUN # | M-MS | 1 140 | MAY 31 * | 38 | MAY 27 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

RAM RIVER NEAR THE MOUTH - STATION NO. 05DC006

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 18 | 12:00 | 3.0 | 5.26 | 12 | MID | | | | | | | | | | | | 383 | | | | DIP |
| MAY 22 | 14:20 | 10.0 | 10.0 | 12 | 32.0 | | | | | | | | | | | | 258 | | | | DH48 |
| JUN 20 | 14:00 | 17.5 | 31.0 | 38 | 38.0 | | | | | | | | | | | | 214 | | | | DH48 |
| JUL 17 | 14:35 | 17.5 | 14.0 | 10 | 44.0 | | | | | | | | | | | | 250 | | | | DH48 |
| AUG 20 | 15:11 | 12.5 | 7.55 | 1 | 44.0 | | | | | | | | | | | | 299 | | | | DH48 |
| SEP 27 | 10:27 | 0.0 | 11.1 | 7 | 34.0 | | | | | | | | | | | | 272 | | | | DH48 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

RAM RIVER NEAR THE MOUTH - STATION NO. 05DC006

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-SEP # | M-MS | 356 | AUG 12 | 12 | APR 26 | --- | --- | --- | --- | --- |
| 1977 | APR-SEP # | M-MS | 242 | MAY 26 | 11 | SEP 15 | --- | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 384 | MAY 23 | 4 | SEP 26 | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 43 | MAY 22 | 0 | AUG 14 * | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 1 500 | JUN 05 * | 8 | OCT 29 | --- | --- | --- | --- | --- |
| 1981 | APR-OCT # | M-MS | 142 | MAY 28 | 1 | SEP 28 | --- | --- | --- | --- | --- |
| 1982 | MAY-OCT # | M-MS | 885 | JUL 05 | 1 | SEP 14 | --- | --- | --- | --- | --- |
| 1983 | MAY-SEP # | M-MS | 1 330 | MAY 30 | 2 | SEP 27 | --- | --- | --- | --- | --- |
| 1984 | APR-SEP | M-MS | 38 | JUN 20 | 1 | AUG 20 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

RED DEER RIVER AT DRUMHELLER - STATION NO. 05CE001

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 51 28 08 N LONG 112 42 30 W
DRAINAGE AREA: 24 800 km²
TYPE OF FLOW: REGULATED SINCE 1983
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 109 636.12 TONNES FOR THE PERIOD APR 01 TO OCT 31

REMARKS:

| | APR | | | MAY | | | JUN | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 47.1 B | 415 E | 1 890 | 19.9 | 9 | 15.5 | 52.1 | 12 | 54.0 | 1 |
| 2 | 56.4 B | 285 E | 1 290 | 20.1 | 13 S | 22.6 | 46.8 | 12 | 50.6 | 2 |
| 3 | 51.7 B | 240 S | 1 280 | 20.4 | 70 | 123 | 34.8 | 12 | 36.1 | 3 |
| 4 | 58.7 | 172 S | 872 | 27.6 | 142 | 338 | 22.4 | 15 S | 42.0 | 4 |
| 5 | 59.5 | 130 | 868 | 35.4 | 136 | 418 | 27.2 | 177 | 418 | 5 |
| 6 | 62.0 | 123 S | 659 | 35.1 | 123 S | 373 | 25.8 | 518 | 1 150 | 6 |
| 7 | 58.7 | 152 | 902 | 34.4 | 114 | 339 | 24.8 | 984 S | 2 110 | 7 |
| 8 | 52.9 | 116 S | 530 | 38.5 | 107 | 356 | 28.7 | 1 800 | 4 490 | 8 |
| 9 | 45.2 | 98 | 383 | 42.4 | 102 | 374 | 33.2 | 2 500 | 7 170 | 9 |
| 10 | 36.9 | 81 S | 184 | 43.0 | 98 | 364 | 29.5 | 2 370 S | 6 040 | 10 |
| 11 | 32.6 | 33 | 92.9 | 42.1 | 86 S | 320 | 28.9 | 709 S | 1 770 | 11 |
| 12 | 29.8 | 32 S | 56.6 | 39.7 | 49 | 168 | 40.8 | 313 | 1 100 | 12 |
| 13 | 28.6 | 20 S | 49.4 | 37.7 | 25 S | 81.4 | 44.1 | 284 | 1 010 | 13 |
| 14 | 27.0 | 20 | 46.7 | 36.7 | 23 | 72.9 | 41.9 | 244 | 883 | 14 |
| 15 | 25.4 | 23 | 50.5 | 35.0 | 23 | 71.5 | 38.4 | 240 | 796 | 15 |
| 16 | 24.9 | 31 S | 66.7 | 35.5 | 34 | 104 | 35.1 | 235 | 713 | 16 |
| 17 | 23.9 | 48 | 99.1 | 36.1 | 182 | 505 | 32.3 A | 226 | 631 | 17 |
| 18 | 25.2 | 70 | 152 | 36.0 | 562 | 1 750 | 29.7 A | 221 | 567 | 18 |
| 19 | 27.4 | 102 | 241 | 36.7 | 949 | 4 570 | 28.7 A | 220 | 546 | 19 |
| 20 | 26.3 | 141 | 308 | 72.0 | 1 050 | 6 530 | 30.3 A | 217 | 568 | 20 |
| 21 | 24.9 | 170 S | 366 | 76.0 | 996 | 6 540 | 28.3 A | 220 | 557 | 21 |
| 22 | 24.1 | 159 | 331 | 65.5 | 941 | 5 330 | 30.4 A | 221 | 580 | 22 |
| 23 | 23.4 | 128 | 259 | 62.0 | 905 | 4 850 | 29.0 A | 220 | 551 | 23 |
| 24 | 23.0 | 85 | 181 | 59.9 | 865 | 4 450 | 25.7 A | 220 | 489 | 24 |
| 25 | 23.0 | 65 | 129 | 58.5 | 825 | 4 170 | 24.1 A | 225 | 468 | 25 |
| 26 | 22.8 | 34 | 67.0 | 53.1 | 795 | 3 650 | 24.4 A | 229 | 483 | 26 |
| 27 | 22.1 | 14 S | 26.7 | 52.0 | 769 | 3 530 | 20.3 A | 237 S | 416 | 27 |
| 28 | 21.8 | 9 | 17.0 | 53.9 | 727 S | 3 390 | 20.1 A | 223 | 387 | 28 |
| 29 | 21.3 | 8 | 14.7 | 51.7 | 494 | 2 210 | 17.1 A | 199 | 294 | 29 |
| 30 | 21.1 | 8 S | 14.6 | 49.9 | 110 S | 474 | 15.2 A | 160 | 210 | 30 |
| 31 | | | | 51.8 | 16 | 71.7 | | | | 31 |
| TOTAL | 1 046.8 | | 11 046.9 | 1 378.8 | | 55 510.9 | 922.9 | | 34 548.7 | TOTAL |

| | JUL | | | AUG | | | SEP | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 14.8 A | 112 | 143 | 27.6 | 43 | 103 | 29.6 | 40 E | 102 | 1 |
| 2 | 14.8 A | 65 | 83.3 | 31.7 | 50 | 137 | 29.0 | 35 E | 87.7 | 2 |
| 3 | 14.8 A | 38 S | 47.9 | 33.5 | 58 S | 171 | 24.8 | 30 E | 64.3 | 3 |
| 4 | 14.8 A | 34 | 42.9 | 35.9 | 80 | 185 | 21.9 | 20 E | 37.8 | 4 |
| 5 | 14.8 A | 34 | 42.6 | 28.3 | 57 | 144 | 18.2 | 10 E | 19.7 | 5 |
| 6 | 14.3 A | 35 | 43.2 | 25.3 | 84 | 184 | 17.8 | 10 E | 15.4 | 6 |
| 7 | 14.0 E | 33 | 39.9 | 30.4 | 110 | 289 | 35.2 | 40 E | 122 | 7 |
| 8 | 13.0 E | 33 | 35.9 | 35.7 | 109 | 336 | 21.7 | 30 E | 56.2 | 8 |
| 9 | 12.0 E | 32 | 33.2 | 35.2 | 87 | 265 | 23.7 | 30 E | 61.4 | 9 |
| 10 | 13.2 E | 33 | 37.6 | 35.1 | XX | 270 | 25.3 | 30 E | 65.9 | 10 |
| 11 | 12.6 E | 33 | 35.9 | 35.2 | 82 | 249 | 25.4 | 30 E | 65.8 | 11 |
| 12 | 13.0 E | 34 | 38.2 | 26.8 | 77 | 178 | 25.5 | 30 E | 68.7 | 12 |
| 13 | 18.7 E | 34 | 54.9 | 21.9 | 71 | 134 | 25.5 | 30 E | 66.7 | 13 |
| 14 | 25.0 E | 35 | 76.6 | 22.2 | 84 | 123 | 25.4 | 30 E | 65.8 | 14 |
| 15 | 16.6 E | 35 | 47.2 | 25.9 | 65 | 122 | 25.1 | 30 E | 65.1 | 15 |
| 16 | 15.4 E | 35 | 46.6 | 26.5 | 43 | 98.5 | 25.0 | 30 E | 64.8 | 16 |
| 17 | 16.7 E | 34 | 49.1 | 26.4 | 31 | 70.7 | 24.0 | 30 E | 62.2 | 17 |
| 18 | 16.9 E | 34 | 49.6 | 26.5 | 21 | 48.1 | 23.7 | 30 E | 61.4 | 18 |
| 19 | 16.7 E | 32 | 46.2 | 27.6 | 13 S | 31.2 | 23.1 | 30 E | 59.9 | 19 |
| 20 | 16.0 A | 32 | 44.2 | 28.1 | 11 | 28.7 | 24.8 | 30 E | 63.8 | 20 |
| 21 | 16.5 | 31 | 44.2 | 27.5 | 10 | 23.6 | 41.9 | 50 E | 181 | 21 |
| 22 | 16.0 | 29 | 45.1 | 26.7 | 8 | 20.5 | 43.9 | 50 E | 190 | 22 |
| 23 | 17.0 | 30 | 44.1 | 25.5 | 8 | 18.3 | 37.4 | 40 E | 129 | 23 |
| 24 | 16.2 | 28 | 39.2 | 23.9 | 7 | 14.5 | 32.5 | 40 E | 113 | 24 |
| 25 | 15.0 | 27 | 35.0 | 18.2 | 7 | 11.0 | 48.4 | 50 E | 209 | 25 |
| 26 | 17.9 | 27 S | 41.8 | 15.9 | 7 | 9.37 | 35.0 | 40 E | 121 | 26 |
| 27 | 23.4 | 27 | 54.6 | 15.2 | 6 | 7.88 | 33.9 | 30 E | 87.9 | 27 |
| 28 | 23.5 | 27 | 54.8 | 15.1 | 6 | 7.83 | 34.7 | 30 E | 89.9 | 28 |
| 29 | 26.4 | 28 | 63.9 | 14.9 | 5 | 6.44 | 33.9 | 30 E | 87.9 | 29 |
| 30 | 28.4 | 30 | 73.7 | 17.4 | 7 | 10.5 | 32.7 | 30 E | 84.8 | 30 |
| 31 | 23.5 | 36 | 73.1 | 18.6 | 8 | 13.5 | | | | 31 |
| TOTAL | 534.0 | | 1 809.5 | 807.2 | | 3 340.12 | 870.8 | | 2 587.8 | TOTAL |

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

RED DEER RIVER AT DRUMHELLER - STATION NO. 05CE001

SUSPENDED SEDIMENT FOR 1984

OCT

| DAY | DAILY DISCHARGE ($m^3/s$) | | MEAN CONCENTRATION (mg/L) | | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 31.6 | | 30 | E | 81.9 | | | | | | | 1 |
| 2 | 30.8 | | 20 | E | 53.2 | | | | | | | 2 |
| 3 | 30.2 | | 30 | E | 52.2 | | | | | | | 3 |
| 4 | 29.9 | | 20 | E | 51.7 | | | | | | | 4 |
| 5 | 29.0 | | 20 | E | 50.1 | | | | | | | 5 |
| 6 | 25.5 | | 20 | E | 44.1 | | | | | | | 6 |
| 7 | 23.3 | | 20 | E | 40.3 | | | | | | | 7 |
| 8 | 23.5 | | 20 | E | 40.6 | | | | | | | 8 |
| 9 | 22.9 | | 20 | E | 39.6 | | | | | | | 9 |
| 10 | 24.1 | | 20 | E | 41.6 | | | | | | | 10 |
| 11 | 28.6 | | 20 | E | 49.4 | | | | | | | 11 |
| 12 | 29.0 | | 20 | E | 50.1 | | | | | | | 12 |
| 13 | 29.2 | | 20 | E | 50.5 | | | | | | | 13 |
| 14 | 29.3 | | 20 | E | 50.6 | | | | | | | 14 |
| 15 | 29.0 | | 20 | E | 50.1 | | | | | | | 15 |
| 16 | 28.7 | | 20 | E | 49.6 | | | | | | | 16 |
| 17 | 26.8 | | 10 | E | 24.9 | | | | | | | 17 |
| 18 | 25.7 | | 10 | E | 23.2 | | | | | | | 18 |
| 19 | 24.2 | B | 10 | E | 20.9 | | | | | | | 19 |
| 20 | 20.8 | B | 10 | E | 18.0 | | | | | | | 20 |
| 21 | 23.5 | B | 10 | E | 20.3 | | | | | | | 21 |
| 22 | 23.6 | B | 10 | E | 20.4 | | | | | | | 22 |
| 23 | 20.5 | B | 10 | E | 17.7 | | | | | | | 23 |
| 24 | 18.8 | B | 9 | E | 15.4 | | | | | | | 24 |
| 25 | 18.7 | B | 8 | E | 12.9 | | | | | | | 25 |
| 26 | 16.8 | B | 8 | E | 12.9 | | | | | | | 26 |
| 27 | 14.7 | B | 7 | E | 8.89 | | | | | | | 27 |
| 28 | 14.2 | B | 7 | E | 8.59 | | | | | | | 28 |
| 29 | 9.80 | B | 7 | E | 5.93 | | | | | | | 29 |
| 30 | 7.52 | B | 6 | E | 3.90 | | | | | | | 30 |
| 31 | 7.70 | B | 6 | E | 3.99 | | | | | | | 31 |
| TOTAL | 722.72 | | | | 1 012.50 | | | | | | | TOTAL |

B - ICE CONDITIONS E - ESTIMATED

RED DEER RIVER AT DRUMHELLER - STATION NO 05CE001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP (°C) | INSTANT DISCHARGE ($m^3/s$) | INSTANT CONCENT (mg/L) | SINGLE SAMPLING VERTICAL | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES 002 | 004 | 008 | 016 | 031 | 062 | 125 | 250 | 500 | 1 00 | 2 00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 03 | 17:30 | 2.2 | 56.6 B | 267 C | 1ORB | | | | | | | | | | | | 281 | | | | DH59 |
| APR 04 | 13:30 | 4.0 | 56.9 | 163 C | 1ORB | | | | | | | | | | | | 282 | | | | DH59 |
| APR 04 | 18:00 | 2.8 | 56.6 | 130 C | 1ORB | | | | | | | | | | | | | | | | DH59 |
| APR 05 | 17:45 | 3.3 | 56.9 | 106 C | 1ORB | | | | | | | | | | | | | | | | DH59 |
| APR 08 | 09:50 | 2.2 | 56.5 | 118 | 1ORB | | | | | | | | | | | | 241 | | | | DH59 |
| APR 10 | 18:30 | 8.7 | 36.1 | 61 | 1ORB | | | | | | | | | | | | 244 | | | | DH59 |
| APR 12 | 17:30 | 10.0 | 28.5 | 20 | 1ORB | | | | | | | | | | | | | | | | DH59 |
| APR 13 | 10:30 | 8.0 | 28.4 | 20 | 1ORB | | | | | | | | | | | | | | | | DH59 |
| APR 16 | 18:10 | 15.6 | 24.2 | 33 | 1ORB | | | | | | | | | | | | | | | | DH59 |
| APR 21 | 10:00 | 10.6 | 25.1 | 173 | 1ORB | | | | | | | | | | | | 284 | | | | DH59 |
| APR 27 | 17:45 | 11.1 | 21.9 | 11 | 1ORB | | | | | | | | | | | | | | | | DH59 |
| APR 30 | 17:25 | 12.8 | 21.3 | 9 | 1ORB | | | | | | | | | | | | 264 | | | | DH59 |
| MAY 02 | 12:35 | 9.5 | 20.0 | 12 | 1ORB | | | | | | | | | | | | 270 | | | | DH59 |
| MAY 06 | 09:00 | 8.3 | 35.4 | 122 | 1ORB | | | | | | | | | | | | | | | | DH59 |
| MAY 11 | 12:10 | 7.0 | 42.6 | 82 | 1ORB | | | | | | | | | | | | 277 | | | | DH59 |
| MAY 13 | 08:15 | 12.8 | 38.1 | 24 | 1ORB | | | | | | | | | | | | | | | | DH59 |
| MAY 28 | 18:20 | 15.7 | 52.7 | 737 | 1ORB | 31 | 72 | 93 | 97 | 98 | 99 | 100 | | | | | 260 | 1 | 27 | 72 | DH59 |
| MAY 28 | 18:21 | 15.7 | 52.7 | 719 | 1ORB | 16 | 41 | 91 | 95 | 97 | 97 | 100 | | | | | 248 | 3 | 56 | 41 | DH59 |
| MAY 30 | 18:20 | 20.0 | 50.0 | 25 | 1ORB | | | | | | | | | | | | 235 | | | | DH59 |
| JUN 04 | 09:30 | 15.7 | 32.7 | 8 | 1ORB | | | | | | | | | | | | | | | | DH59 |
| JUN 07 | 12:00 | 15.1 | 25.2 | 948 | 1ORB | 63 | 75 | 85 | 95 | 96 | 97 | 98 | 99 | 100 | | | 241 | 3 | 22 | 75 | DH59 |
| JUN 07 | 12:01 | 15.1 | 25.2 | 942 | 1ORB | 60 | 76 | 87 | 96 | 97 | 98 | 98 | 100 | | | | 237 | 2 | 23 | 75 | DH59 |
| JUN 10 | 14:55 | 15.0 | 28.2 | 2380 | 1ORB | | | | | | | | | | | | 232 | | | | DH59 |
| JUN 11 | 10:45 | 15.0 | 28.0 | 535 | 1ORB | | | | | | | | | | | | 226 | | | | DH59 |
| JUN 27 | 15:30 | 24.0 | 20.0 | 238 | 1ORB | | | | | | | | | | | | 187 | | | | DH59 |
| JUL 03 | 09:25 | 24.4 | 14.8 | 37 | 1ORB | | | | | | | | | | | | 175 | | | | DH59 |
| JUL 26 | 13:37 | 25.8 | 18.8 | 27 | 1ORB | | | | | | | | | | | | 156 | | | | DH59 |
| AUG 03 | 10:50 | 20.0 | 33.8 | 69 | 1ORB | | | | | | | | | | | | 163 | | | | DH59 |
| AUG 19 | 14:50 | 21.1 | 28.0 | 13 | 1ORB | | | | | | | | | | | | 144 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT 1ORB

DISCHARGE SYMBOL(S): B - ICE CONDITIONS
CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

ALBERTA

RED DEER RIVER AT DRUMHELLER - STATION NO. 05CE001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | FEB-DEC # | M-S | 4 750 | MAY 05 | 0 | FEB 21 * | 118 000 | APR 21 | 807 000 | --- | --- | --- |
| 1976 | JAN-DEC # | M-S | 2 890 | JUN 14 | 3 | OCT 01 | 18 400 | APR 12 | 184 000 | --- | --- | --- |
| 1977 | JAN-DEC | M-C | 5 670 | MAY 23 | 4 | DEC 18 | 56 800 | MAY 23 | 392 000 | 1 590 | 1 590 | --- |
| 1978 | JAN-DEC | M-C | 7 780 | SEP 08 | 2 | JAN 05 | 40 100 | SEP 08 | 854 000 | 2 670 | 2 130 | 25.4 |
| 1979 | JAN-OCT | M-S | 3 970 | JUL 23 | 2 | AUG 19 | 18 000 | JUL 23 | 110 000 | 447 | 1 570 | 40.8 |
| 1980 | MAR-OCT | M-S | 5 520 | JUL 25 | 2 | MAY 15 | 48 500 | AUG 08 | 833 000 | 3 400 | 2 030 | 31.8 |
| 1981 | MAR-NOV | M-S | 17 800 | MAY 07 * | 4 | OCT 04 | 148 000 | AUG 01 * | 1 220 000 * | --- | --- | --- |
| 1982 | MAR-OCT | M-S | 3 330 | JUL 03 | 5 | SEP 23 | 78 300 | JUL 08 | 858 000 | 3 500 | 2 320 | 25.0 |
| 1983 | APR-OCT | M-S | 5 330 | JUL 08 | 1 | OCT 11 | 64 000 | JUL 08 | 423 000 | --- | --- | --- |
| 1984 | APR-AUG | M-S | 2 380 | JUN 10 | 8 | APR 30 | 7 170 | JUN 09 | 110 000 | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION

S - SEASONAL OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

RED DEER RIVER AT RED DEER - STATION NO. 05CC001

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 52 18 36 N LONG 113 48 57 W
DRAINAGE AREA: 11 800 km²
TYPE OF FLOW: REGULATED SINCE 1983
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 6 200.95 TONNES FOR THE PERIOD MAR 27 TO OCT 31

REMARKS:

| | MAR | | | APR | | | MAY | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 17.6 B | | | 31.9 | 11 | 30.3 | 18.5 | 8 | 11.4 | 1 |
| 2 | 17.5 B | | | 31.5 | 11 | 29.8 | 25.2 | 9 S | 19.5 | 2 |
| 3 | 17.6 B | | | 30.8 | 11 S | 29.3 | 28.2 | 8 | 20.2 | 3 |
| 4 | 18.9 B | | | 32.3 | 11 | 30.7 | 30.0 | 8 S | 20.7 | 4 |
| 5 | 18.5 B | | | 32.8 | 12 S | 34.0 | 27.9 | 7 | 18.9 | 5 |
| 6 | 18.3 B | | | 34.0 | 11 | 32.3 | 29.3 | 8 S | 15.2 | 6 |
| 7 | 14.5 B | | | 31.0 | 11 | 29.5 | 33.5 | 8 | 17.4 | 7 |
| 8 | 14.5 B | | | 29.2 | 10 | 25.2 | 34.4 | 7 S | 20.8 | 8 |
| 9 | 14.2 B | | | 25.7 | 10 | 22.2 | 34.4 | 9 S | 26.7 | 9 |
| 10 | 13.9 B | | | 23.7 | 9 S | 18.4 | 34.0 | 7 S | 20.6 | 10 |
| 11 | 11.4 B | | | 22.5 | 8 | 15.6 | 33.1 | 5 | 14.3 | 11 |
| 12 | 11.4 B | | | 22.5 | 8 | 15.6 | 32.2 | 4 S | 11.1 | 12 |
| 13 | 11.3 B | | | 20.6 | 7 | 12.5 | 31.2 | 4 | 10.8 | 13 |
| 14 | 12.8 B | | | 19.2 | 7 | 11.6 | 31.4 | 5 S | 13.5 | 14 |
| 15 | 11.4 B | | | 18.7 | 6 | 9.89 | 34.0 | 5 | 14.7 | 15 |
| 16 | 12.6 B | | | 18.4 | 5 | 7.95 | 31.0 | 4 S | 10.7 | 16 |
| 17 | 16.0 B | | | 18.8 | 4 | 6.50 | 49.7 | 11 | 47.2 | 17 |
| 18 | 15.7 B | | | 19.2 | 4 | 6.64 | 62.6 | 23 S | 124 | 18 |
| 19 | 16.1 B | | | 19.7 | 3 | 5.11 | 74.0 | 23 | 147 | 19 |
| 20 | 16.1 B | | | 19.4 | 3 S | 5.03 | 74.3 | 16 S | 103 | 20 |
| 21 | 17.8 B | | | 18.6 | 3 | 4.82 | 68.7 | 11 | 85.3 | 21 |
| 22 | 18.2 B | | | 18.7 | 4 S | 6.46 | 67.1 | 11 S | 83.8 | 22 |
| 23 | 15.2 | | | 18.8 | 4 | 6.53 | 63.9 | 9 S | 49.7 | 23 |
| 24 | 22.6 | | | 18.8 | 4 S | 6.53 | 54.2 | 8 S | 37.6 | 24 |
| 25 | 22.2 | | | 19.0 | 3 | 4.92 | 50.6 | 8 S | 35.0 | 25 |
| 26 | 22.7 | | | 18.3 | 3 S | 4.74 | 49.3 | 8 | 38.3 | 26 |
| 27 | 22.8 | 12 S | 23.6 | 18.3 | 3 | 4.74 | 50.1 | 9 | 39.0 | 27 |
| 28 | 26.5 | 12 | 27.5 | 17.7 | 3 S | 4.59 | 51.3 | 9 S | 39.8 | 28 |
| 29 | 31.7 | 12 | 32.9 | 17.5 | 4 | 6.05 | 53.2 | 8 | 36.8 | 29 |
| 30 | 31.8 | 12 | 32.8 | 17.0 | 5 S | 7.34 | 53.7 | 8 S | 37.1 | 30 |
| 31 | 33.1 | 11 | 31.5 | | | | 54.8 | 7 | 33.1 | 31 |
| TOTAL | 550.7 | | 148.3 | 884.8 | | 434.74 | 1 384.7 | | 1 161.4 | TOTAL |

| | JUN | | | JUL | | | AUG | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 33.7 | 5 S | 14.6 | 14.2 E | 8 | 9.82 | 34.9 | 10 | 30.2 | 1 |
| 2 | 30.5 | 5 | 13.2 | 12.3 E | 10 | 10.6 | 35.6 | 10 | 30.8 | 2 |
| 3 | 22.0 | 3 S | 5.70 | 12.6 A | 12 S | 13.3 | 27.9 | 12 | 28.9 | 3 |
| 4 | 21.0 | 3 | 5.44 | 12.8 | 13 | 14.5 | 27.2 | 13 S | 30.6 | 4 |
| 5 | 20.3 | 2 S | 3.51 | 12.9 | 12 | 13.4 | 37.2 | 10 | 32.1 | 5 |
| 6 | 20.8 | 3 | 5.39 | 12.7 | 12 | 13.2 | 42.0 | 7 S | 25.4 | 6 |
| 7 | 20.4 | 6 S | 10.8 | 12.5 | 12 | 13.0 | 41.4 | 5 | 17.9 | 7 |
| 8 | 22.8 | 13 | 25.6 | 11.2 | 11 | 10.6 | 41.3 | 5 S | 17.8 | 8 |
| 9 | 24.5 | 15 S | 40.2 | 10.5 | 11 S | 9.88 | 39.7 | 5 | 17.2 | 9 |
| 10 | 33.6 | 18 | 52.3 | 11.7 | 11 | 11.1 | 25.8 | 7 | 15.6 | 10 |
| 11 | 38.4 | 15 S | 49.8 | 11.0 | 11 | 10.5 | 23.3 | 9 S | 18.1 | 11 |
| 12 | 37.5 | 16 | 51.8 | 17.1 | 13 | 19.2 | 25.6 | 7 | 15.5 | 12 |
| 13 | 35.0 | 17 S | 51.4 | 24.7 | 14 | 29.8 | 27.8 | 8 S | 14.4 | 13 |
| 14 | 30.4 | 12 | 31.5 | 14.8 | 11 S | 13.9 | 26.5 | 4 | 9.18 | 14 |
| 15 | 26.5 | 7 S | 16.0 | 14.0 | 11 | 13.3 | 26.0 | 3 S | 7.28 | 15 |
| 16 | 23.6 | 5 | 10.2 | 13.8 | 11 | 13.1 | 26.4 | 3 | 7.36 | 16 |
| 17 | 22.8 | 5 S | 9.78 | 15.1 | 11 | 14.4 | 26.1 | 4 S | 9.71 | 17 |
| 18 | 22.2 | 5 | 9.59 | 15.3 | 11 | 14.5 | 26.1 | 4 | 9.71 | 18 |
| 19 | 22.6 | 5 S | 9.78 | 15.1 | 11 | 14.4 | 26.7 | 4 S | 9.92 | 19 |
| 20 | 21.8 | 4 | 7.48 | 15.7 | 11 | 14.8 | 26.8 | 4 | 9.30 | 20 |
| 21 | 21.2 | 4 S | 7.33 | 15.7 | 11 S | 14.8 | 26.1 | 5 S | 11.3 | 21 |
| 22 | 18.7 | 5 | 10.2 | 14.5 | 11 | 13.8 | 16.6 | 3 | 4.82 | 22 |
| 23 | 18.2 | 14 S | 22.0 | 14.7 | 11 | 14.0 | 14.0 | 2 S | 2.42 | 23 |
| 24 | 18.3 | 17 | 26.8 | 22.2 | 11 | 21.1 | 14.2 | 2 | 2.45 | 24 |
| 25 | 18.2 | 13 | 20.4 | 22.4 | 11 | 21.3 | 15.2 | 3 | 3.94 | 25 |
| 26 | 15.3 | 5 S | 8.45 | 22.3 | 10 | 19.3 | 15.0 | 3 | 3.88 | 26 |
| 27 | 15.7 | 4 | 6.43 | 22.5 | 10 | 19.4 | 17.8 | 3 | 4.81 | 27 |
| 28 | 14.9 | 4 | 6.15 | 22.9 | 10 S | 19.6 | 16.8 | 4 S | 6.50 | 28 |
| 29 | 14.8 | 4 | 6.11 | 23.5 | 10 | 20.3 | 24.9 | 4 | 8.61 | 29 |
| 30 | 14.2 | 5 | 6.13 | 33.0 | 10 | 28.5 | 31.8 | 5 S | 13.7 | 30 |
| 31 | | | | 35.0 | 10 | 30.2 | 25.9 | 4 | 8.95 | 31 |
| TOTAL | 701.5 | | 540.91 | 528.8 | | 500.20 | 848.7 | | 428.11 | TOTAL |

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

RED DEER RIVER AT RED DEER - STATION NO. OSCC002

SUSPENDED SEDIMENT FOR 1984

| DAY | SEP DAILY DISCHARGE ($m^3/s$) | SEP MEAN CONCENTRATION (mg/L) | SEP DAILY LOAD (t) | OCT DAILY DISCHARGE ($m^3/s$) | OCT MEAN CONCENTRATION (mg/L) | OCT DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24.2 | 2 S | 4.18 | 27.8 | 48 E | 116 | | | | 1 |
| 2 | 18.7 | 4 | 6.46 | 27.6 | 40 E | 95.4 | | | | 2 |
| 3 | 16.9 | 19 S | 27.7 | 26.5 | 30 E | 68.7 | | | | 3 |
| 4 | 15.8 | 32 | 43.1 | 21.6 | 20 E | 37.3 | | | | 4 |
| 5 | 15.1 | 40 S | 52.2 | 21.1 | 10 E | 18.2 | | | | 5 |
| 6 | 18.1 | 42 | 65.7 | 21.4 | 20 E | 37.0 | | | | 6 |
| 7 | 22.0 | 34 | 64.6 | 21.3 | 25 E | 46.0 | | | | 7 |
| 8 | 20.8 | 26 | 46.7 | 24.5 | 30 E | 63.5 | | | | 8 |
| 9 | 21.5 | 20 | 37.2 | 28.6 | 30 E | 74.1 | | | | 9 |
| 10 | 21.0 | 15 | 27.2 | 28.6 | 30 E | 74.1 | | | | 10 |
| 11 | 21.7 | 11 | 20.6 | 28.6 | 30 E | 73.9 | | | | 11 |
| 12 | 22.3 | 8 | 15.4 | 28.9 | 30 E | 74.9 | | | | 12 |
| 13 | 22.6 | 7 | 13.7 | 28.6 | 30 E | 74.1 | | | | 13 |
| 14 | 22.4 | 6 | 11.8 | 28.2 | 30 E | 73.1 | | | | 14 |
| 15 | 22.1 | 6 | 11.5 | 27.6 | 30 E | 71.5 | | | | 15 |
| 16 | 21.8 | 6 | 11.4 | 23.3 | 25 E | 50.3 | | | | 16 |
| 17 | 22.0 | 5 | 9.50 | 18.0 | 30 E | 32.4 | | | | 17 |
| 18 | 24.2 | 5 | 10.5 | 20.6 | 15 E | 26.7 | | | | 18 |
| 19 | 24.8 | 8 | 12.8 | 20.4 | 10 E | 17.6 | | | | 19 |
| 20 | 25.6 | 9 | 18.9 | 19.5 | 8 E | 13.5 | | | | 20 |
| 21 | 27.7 | 19 | 45.5 | 19.1 | 8 E | 13.2 | | | | 21 |
| 22 | 27.8 | 36 | 86.8 | 18.5 | 8 E | 12.8 | | | | 22 |
| 23 | 51.4 | 53 | 235 | 18.1 | 8 E | 12.5 | | | | 23 |
| 24 | 28.3 | 63 | 154 | 18.5 | 8 E | 12.8 | | | | 24 |
| 25 | 28.3 | 65 | 159 | 19.1 | 8 E | 13.2 | | | | 25 |
| 26 | 29.8 | 61 | 157 | 19.0 | 8 E | 13.1 | | | | 26 |
| 27 | 30.0 | 55 | 143 | 18.4 | 8 E | 12.7 | | | | 27 |
| 28 | 28.4 | 52 S | 132 | 19.4 | 8 E | 13.4 | | | | 28 |
| 29 | 28.7 | 51 | 126 | 18.9 | 5 E | 8.16 | | | | 29 |
| 30 | 28.2 | 50 | 122 | 16.0 B | 5 E | 6.91 | | | | 30 |
| 31 | | | | 13.6 B | 5 E | 5.88 | | | | 31 |
| TOTAL | 733.0 | | 1 872.24 | 692.3 | | 1 263.35 | | | | TOTAL |

B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

RED DEER RIVER AT RED DEER - STATION NO. 05CE003

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 27 | 09:15 | 2.0 | 21.7 | | 12 | 10LB | | | | | | | | | | | | 275 | | | | DH59 |
| APR 03 | 16:30 | 5.0 | 29.6 | | 11 | 10LB | | | | | | | | | | | | 244 | | | | DH59 |
| APR 05 | 15:30 | 6.0 | 30.7 | | 12 | 10LB | | | | | | | | | | | | | | | | DH59 |
| APR 10 | 15:55 | 7.0 | 24.3 | | 9 | 10LB | | | | | | | | | | | | 242 | | | | DH59 |
| APR 20 | 10:30 | 8.0 | 19.8 | | 3 | 10LB | | | | | | | | | | | | | | | | DH59 |
| APR 22 | 11:30 | 8.0 | 18.9 | | 4 | 10LB | | | | | | | | | | | | | | | | DH59 |
| APR 24 | 18:00 | 9.0 | 19.1 | | 4 | 10LB | | | | | | | | | | | | | | | | DH59 |
| APR 26 | 15:00 | 7.0 | 18.5 | | 3 | 10LB | | | | | | | | | | | | 252 | | | | DH59 |
| APR 28 | 14:00 | 8.0 | 17.7 | | 3 | 10LB | | | | | | | | | | | | | | | | DH59 |
| APR 30 | 13:30 | 9.0 | 17.0 | | 5 | 10LB | | | | | | | | | | | | 258 | | | | DH59 |
| MAY 02 | 15:00 | 10.0 | 28.8 | | 9 | 10LB | | | | | | | | | | | | | | | | DH59 |
| MAY 04 | 13:30 | 6.0 | 29.5 | | 8 | 10LB | | | | | | | | | | | | 262 | | | | DH59 |
| MAY 06 | 16:00 | 8.0 | 30.1 | | 5 | 10LB | | | | | | | | | | | | 254 | | | | DH59 |
| MAY 08 | 15:30 | 10.0 | 34.3 | | 8 | 10LB | | | | | | | | | | | | | | | | DH59 |
| MAY 09 | 16:00 | 9.0 | 34.3 | | 33 | 10LB | | | | | | | | | | | | 283 | | | | DH59 |
| MAY 10 | 15:00 | 9.0 | 33.7 | | 7 | 10LB | | | | | | | | | | | | | | | | DH59 |
| MAY 12 | 12:00 | 10.0 | 31.8 | | 4 | 10LB | | | | | | | | | | | | | | | | DH59 |
| MAY 14 | 11:00 | 10.0 | 30.9 | | 5 | 10LB | | | | | | | | | | | | | | | | DH59 |
| MAY 16 | 11:00 | 8.0 | 31.4 | | 4 | 10LB | | | | | | | | | | | | 245 | | | | DH59 |
| MAY 18 | 12:00 | 10.0 | 56.7 | | 24 | 10LB | | | | | | | | | | | | 255 | | | | DH59 |
| MAY 20 | 18:00 | 12.0 | 72.2 | | 13 | 10LB | | | | | | | | | | | | 250 | | | | DH59 |
| MAY 22 | 18:00 | 10.0 | 66.0 | | 12 | 10LB | | | | | | | | | | | | | | | | DH59 |
| MAY 23 | 16:00 | 10.0 | 62.9 | | 9 | 10LB | | | | | | | | | | | | | | | | DH59 |
| MAY 24 | 17:00 | 10.0 | 52.4 | | 8 | 10LB | | | | | | | | | | | | | | | | DH59 |
| MAY 25 | 11:30 | 11.0 | 50.1 | | 9 | 10LB | | | | | | | | | | | | 255 | | | | DH59 |
| MAY 28 | 18:30 | 14.0 | 50.6 | | 9 | 10LB | | | | | | | | | | | | 244 | | | | DH59 |
| MAY 30 | 18:00 | 12.0 | 53.0 | | 8 | 10LB | | | | | | | | | | | | 240 | | | | DH59 |
| JUN 01 | 12:30 | 11.0 | 30.5 | | 5 | 10LB | | | | | | | | | | | | 248 | | | | DH59 |
| JUN 03 | 21:30 | 17.0 | 20.6 | | 3 | 10LB | | | | | | | | | | | | 249 | | | | DH59 |
| JUN 05 | 21:30 | 16.0 | 20.9 | | 2 | 10LB | | | | | | | | | | | | 248 | | | | DH59 |
| JUN 07 | 14:00 | 12.0 | 19.7 | | 6 | 10LB | | | | | | | | | | | | 237 | | | | DH59 |
| JUN 09 | 18:00 | 15.0 | 24.1 | | 19 | 10LB | | | | | | | | | | | | | | | | DH59 |
| JUN 11 | 18:00 | 20.0 | 37.3 | | 14 | 10LB | | | | | | | | | | | | 237 | | | | DH59 |
| JUN 13 | 09:45 | 17.0 | 34.2 | | 18 | 10LB | | | | | | | | | | | | | | | | DH59 |
| JUN 15 | 18:00 | 17.0 | 25.3 | | 6 | 10LB | | | | | | | | | | | | | | | | DH59 |
| JUN 17 | 18:00 | 18.0 | 21.2 | | 5 | 10LB | | | | | | | | | | | | | | | | DH59 |
| JUN 19 | 20:00 | 15.0 | 21.4 | | 7 | 10LB | | | | | | | | | | | | 228 | | | | DH59 |
| JUN 21 | 20:30 | 17.0 | 20.1 | | 4 | 10LB | | | | | | | | | | | | | | | | DH59 |
| JUN 23 | 12:00 | 18.0 | 17.6 | | 15 | 10LB | | | | | | | | | | | | 233 | | | | DH59 |
| JUN 25 | 11:30 | 18.0 | 15.5 | | 5 | 10LB | | | | | | | | | | | | 230 | | | | DH59 |
| JUL 03 | 14:30 | 20.0 | 12.8 | V | 13 | 10LB | | | | | | | | | | | | | | | | DH59 |
| JUL 09 | 17:30 | 22.0 | 10.2 | | 11 | 10LB | | | | | | | | | | | | | | | | DH59 |
| JUL 14 | 16:00 | 23.0 | 14.0 | | 11 | 10LB | | | | | | | | | | | | 210 | | | | DH59 |
| JUL 21 | 17:00 | 22.0 | 15.8 | | 11 | 10LB | | | | | | | | | | | | | | | | DH59 |
| JUL 28 | 21:00 | 20.0 | 22.5 | | 9 | 10LB | | | | | | | | | | | | | | | | DH59 |
| JUL 28 | 21:30 | 20.0 | 22.9 | | 12 | 10LB | | | | | | | | | | | | 197 | | | | DH59 |
| AUG 04 | 18:00 | 24.0 | 27.7 | | 13 | 10LB | | | | | | | | | | | | | | | | DH59 |
| AUG 06 | 18:00 | 21.0 | 42.1 | | 6 | 10LB | | | | | | | | | | | | | | | | DH59 |
| AUG 08 | 11:00 | 19.0 | 41.1 | | 5 | 10LB | | | | | | | | | | | | | | | | DH59 |
| AUG 11 | 18:00 | 21.0 | 23.1 | | 9 | 10LB | | | | | | | | | | | | 204 | | | | DH59 |
| AUG 13 | 18:00 | 21.0 | 26.7 | | 5 | 10LB | | | | | | | | | | | | | | | | DH59 |
| AUG 15 | 11:00 | 17.0 | 28.4 | | 3 | 10LB | | | | | | | | | | | | | | | | DH59 |
| AUG 17 | 17:00 | 19.0 | 28.1 | | 4 | 10LB | | | | | | | | | | | | | | | | DH59 |
| AUG 19 | 20:00 | 17.0 | 28.3 | | 4 | 10LB | | | | | | | | | | | | | | | | DH59 |
| AUG 21 | 14:00 | 20.0 | 25.7 | | 5 | 10LB | | | | | | | | | | | | 210 | | | | DH59 |
| AUG 23 | 13:00 | 19.0 | 13.7 | | 2 | 10LB | | | | | | | | | | | | | | | | DH59 |
| AUG 28 | 18:00 | 17.0 | 18.7 | | 2 | 10LB | | | | | | | | | | | | 207 | | | | DH59 |
| AUG 28 | 18:15 | 17.0 | 18.7 | | 5 | 10LB | | | | | | | | | | | | 219 | | | | DH59 |
| AUG 30 | 10:30 | 14.0 | 32.2 | | 5 | 10LB | | | | | | | | | | | | | | | | DH59 |
| SEP 01 | 13:30 | 16.0 | 24.2 | | 2 | 10LB | | | | | | | | | | | | 212 | | | | DH59 |
| SEP 03 | 20:00 | 14.0 | 16.7 | | 25 | 10LB | | | | | | | | | | | | 181 | | | | DH59 |
| SEP 05 | 11:00 | 15.0 | 15.1 | | 40 | 10LB | | | | | | | | | | | | 155 | | | | DH59 |
| SEP 28 | 09:00 | 6.0 | 29.3 | | 52 | 10LB | | | | | | | | | | | | 173 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT 10LB

DISCHARGE SYMBOL(S): V - DAILY MEAN; MANUAL GAUGE

## RED DEER RIVER AT RED DEER - STATION NO. 05CC002

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : APR-OCT MEAN LOAD (TONNES) | SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : APR-OCT HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1970 | JUN-JUL # | M-MS | 103 | JUN 04 | 13 | JUL 17 | --- | | --- | | --- | --- | --- |
| 1971 | MAR-DEC | M-S | 1 480 | APR 15 | 0 | OCT 13 * | 41 400 | APR 15 | 274 000 | | 1 270 | 1 270 | --- |
| 1972 | JAN-DEC | M-C | 2 750 | JUN 28 | 0 | AUG 29 | 154 000 | JUN 28 * | 508 000 | | 2 340 | 1 810 | 29.8 |
| 1973 | JAN-DEC | M-C | 1 390 | MAY 28 | 3 | SEP 05 | 31 700 | MAY 28 | 222 000 | | 1 010 | 1 540 | 28.4 |
| 1974 | MAR-OCT | M-S | 1 480 | JUN 18 | 1 | OCT 28 | 28 800 | JUN 18 | 352 000 | | 1 850 | 1 570 | 18.4 |
| 1975 | MAR-OCT # | M-S | 428 | APR 21 | 1 | APR 14 | 7 490 | APR 20 | 58 800 | | 285 | 1 310 | 26.2 |
| 1976 | MAR-NOV | M-S | 636 | AUG 11 | 1 | OCT 30 | 7 140 | AUG 11 | 50 400 | | 233 | 1 130 | 29.4 |
| 1977 | APR-DEC | M-S | 263 | MAY 17 | 1 | DEC 14 | 3 600 | APR 08 | 52 000 | | 242 | 1 000 | 30.8 |
| 1978 | JAN-DEC | M-C | 1 370 | JUN 07 | 0 | NOV 07 | 21 900 | JUN 07 | 131 000 | | 589 | 950 | 28.8 |
| 1979 | JAN-NOV # | M-S | 759 | MAY 28 | 2 | SEP 14 | 7 480 | MAY 28 | 47 500 | | 222 | 889 | 29.1 |
| 1980 | MAR-OCT | M-S | 1 140 | APR 18 | 4 | MAR 27 | 18 900 | APR 16 | 142 000 | | 882 | 848 | 25.8 |
| 1981 | APR-OCT | M-S | 3 090 | JUL 31 * | 4 | APR 18 | 148 000 | JUL 31 | 740 000 | * | 3 480 | 1 090 | 28.8 |
| 1982 | APR-OCT | M-S | 880 | APR 23 | 2 | OCT 25 | 19 500 | JUL 08 | 208 000 | | 963 | 1 080 | 25.8 |
| 1983 | APR-OCT | M-S | 906 | APR 26 | 3 | AUG 13 | 10 400 | APR 27 | 48 400 | | 226 | 1 010 | 25.9 |
| 1984 | MAR-SEP | M-S | 52 | SEP 26 | 2 | JUN 05 | 235 | SEP 23 | 8 350 | | 29.0 | 940 | 27.8 |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## RED DEER RIVER AT SUNDRE - STATION NO. 05CA010

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-AUG # | M-MS | 247 | MAY 11 * | 5 | APR 22 * | --- | | --- | --- | --- | --- |
| 1977 | APR-JUN # | M-MS | 142 | APR 08 | 17 | MAY 19 | --- | | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## RED DEER RIVER BELOW BURNT TIMBER CREEK - STATION NO. 05CA009

### INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 01 | 12:20 | 4.0 | 5.63 | 5 | WELB | | | | | | | | | | | | 256 | | | | D1P |
| MAY 28 | 12:20 | 7.0 | 10.5 | 5 | WELB | | | | | | | | | | | | 272 | | | | D1P |
| JUL 10 | 11:30 | 11.0 | 24.7 | 3 | MID | | | | | | | | | | | | 226 | | | | DH59 |
| AUG 03 | 10:40 | 14.0 | 36.2 | 23 | MID | | | | | | | | | | | | 181 | | | | D49 |
| AUG 28 | 11:00 | 6.0 | 23.8 | 7 | MID | | | | | | | | | | | | 193 | | | | D49 |
| OCT 01 | 12:20 | 4.0 | 14.5 | 10 | WELB | | | | | | | | | | | | 218 | | | | D1P |

NOTE : SINGLE VERTICAL IS UNDETERMINED

RED DEER RIVER BELOW BURNT TIMBER CREEK - STATION NO. 05CA009

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | JUL-SEP # | M-MS | 43 | JUL 28 | 8 SEP 03 | | --- | --- | --- | --- | --- |
| 1975 | MAY-JUL # | M-MS | 24 | JUL 31 | 2 MAY 28 | | --- | --- | --- | --- | --- |
| 1976 | MAY-JUL # | M-MS | 388 | JUL 01 | 3 MAY 18 | | --- | --- | --- | --- | --- |
| 1977 | JUN-AUG # | M-MS | 178 | JUN 02 | 7 AUG 10 | | --- | --- | --- | --- | --- |
| 1978 | MAY-OCT # | M-MS | 730 | JUN 05 * | 4 SEP 05 | | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 342 | AUG 21 | 2 OCT 02 | | --- | --- | --- | --- | --- |
| 1980 | MAY-SEP # | M-MS | 81 | JUN 08 | 3 SEP 25 | | --- | --- | --- | --- | --- |
| 1981 | MAY-SEP # | M-MS | 107 | AUG 25 | 3 SEP 28 | | --- | --- | --- | --- | --- |
| 1982 | MAY-OCT # | M-MS | 15 | JUL 05 | 1 OCT 28 | | --- | --- | --- | --- | --- |
| 1983 | APR-SEP # | M-MS | 268 | MAY 30 | 0 SEP 27 * | | --- | --- | --- | --- | --- |
| 1984 | MAY-OCT | M-MS | 23 | AUG 03 | 3 JUL 10 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

RED DEER RIVER NEAR BINDLOSS - STATION NO. 05CK004

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 50 54 10 N LONG 110 17 50 W
DRAINAGE AREA: 44 700 km²
TYPE OF FLOW: REGULATED SINCE 1908
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 387 958.3 TONNES FOR THE PERIOD MAR 30 TO OCT 31

REMARKS:

| DAY | MAR DAILY DISCHARGE (m³/s) | MAR MEAN CONCENTRATION (mg/L) | MAR DAILY LOAD (t) | APR DAILY DISCHARGE (m³/s) | APR MEAN CONCENTRATION (mg/L) | APR DAILY LOAD (t) | MAY DAILY DISCHARGE (m³/s) | MAY MEAN CONCENTRATION (mg/L) | MAY DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.7 B | | | 82.7 | 590 S | 3 200 | 24.2 | 116 S | 243 | 1 |
| 2 | 18.3 B | | | 80.8 | 417 | 1 820 | 23.8 | 128 | 263 | 2 |
| 3 | 18.4 B | | | 49.6 | 326 S | 1 410 | 23.0 | 139 S | 276 | 3 |
| 4 | 18.8 B | | | 55.9 | 391 | 1 920 | 22.8 | 123 | 242 | 4 |
| 5 | 19.0 B | | | 62.9 | 487 S | 2 540 | 22.1 | 97 S | 186 | 5 |
| 6 | 18.8 B | | | 69.6 | 533 | 3 210 | 21.8 | 182 | 305 | 6 |
| 7 | 19.0 B | | | 73.5 | 447 S | 2 840 | 22.3 | 375 S | 723 | 7 |
| 8 | 18.6 B | | | 66.9 | 386 | 2 120 | 26.0 | 157 S | 353 | 8 |
| 9 | 19.3 B | | | 64.4 | 344 S | 1 910 | 33.2 | 186 S | 534 | 9 |
| 10 | 20.0 B | | | 70.8 | 407 | 2 480 | 33.8 A | 312 | 911 | 10 |
| 11 | 20.1 B | | | 62.8 | 284 S | 1 540 | 33.4 A | 412 S | 1 190 | 11 |
| 12 | 19.6 B | | | 54.1 | 195 | 918 | 35.9 A | 371 | 1 150 | 12 |
| 13 | 19.3 B | | | 48.2 | 168 S | 700 | 41.2 A | 279 S | 893 | 13 |
| 14 | 18.7 B | | | 42.5 | 140 | 514 | 44.3 A | 206 S | 788 | 14 |
| 15 | 18.1 B | | | 38.8 | 113 | 377 | 42.1 | 173 S | 629 | 15 |
| 16 | 17.8 B | | | 38.1 | 88 S | 274 | 41.1 | 132 | 469 | 16 |
| 17 | 17.4 B | | | 33.9 | 88 S | 258 | 37.9 | 102 S | 334 | 17 |
| 18 | 17.3 B | | | 32.0 | 80 | 221 | 35.8 | 111 | 343 | 18 |
| 19 | 16.4 B | | | 31.0 | 85 S | 174 | 34.8 | 133 S | 400 | 19 |
| 20 | 15.8 B | | | 30.4 | 73 | 192 | 33.4 | 141 | 407 | 20 |
| 21 | 15.5 B | | | 29.8 | 81 S | 208 | 32.8 | 138 | 392 | 21 |
| 22 | 16.5 B | | | 30.4 | 91 | 238 | 35.0 | 143 | 432 | 22 |
| 23 | 18.8 B | | | 28.5 | 105 S | 258 | 65.8 | 322 S | 1 580 | 23 |
| 24 | 20.6 B | | | 27.8 | 277 | 661 | 78.8 | 465 | 3 090 | 24 |
| 25 | 21.8 B | | | 27.5 | 478 S | 1 130 | 78.1 | 397 S | 2 710 | 25 |
| 26 | 24.0 B | | | 28.7 | 359 | 828 | 74.8 | 281 | 1 880 | 26 |
| 27 | 26.0 B | | | 28.6 | 149 S | 328 | 74.0 | 223 S | 1 430 | 27 |
| 28 | 34.5 B | | | 26.1 | 118 | 258 | 75.3 | 213 | 1 390 | 28 |
| 29 | 40.0 B | | | 24.5 | 122 S | 258 | 73.4 | 212 S | 1 340 | 29 |
| 30 | 53.0 B | 915 S | 4 190 | 24.7 | 120 | 258 | 69.6 | 303 | 1 820 | 30 |
| 31 | 65.5 | 778 | 4 410 | | | | 68.1 | 476 S | 2 800 | 31 |
| TOTAL | 709.1 | | 8 600 | 1 307.9 | | 33 050 | 1 348.8 | | 29 802 | TOTAL |

| DAY | JUN DAILY DISCHARGE (m³/s) | JUN MEAN CONCENTRATION (mg/L) | JUN DAILY LOAD (t) | JUL DAILY DISCHARGE (m³/s) | JUL MEAN CONCENTRATION (mg/L) | JUL DAILY LOAD (t) | AUG DAILY DISCHARGE (m³/s) | AUG MEAN CONCENTRATION (mg/L) | AUG DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 85.8 | 388 S | 2 200 | 30.3 | 332 | 869 | 44.9 | 1 130 | 4 380 | 1 |
| 2 | 83.0 | 288 | 1 440 | 29.0 | 211 S | 529 | 58.3 | 1 830 S | 9 220 | 2 |
| 3 | 82.2 | 199 | 1 070 | 28.0 | 183 | 394 | 81.1 | 2 320 | 12 200 | 3 |
| 4 | 83.4 | 217 S | 1 190 | 28.3 | 139 | 318 | 69.5 | 2 380 S | 10 200 | 4 |
| 5 | 83.5 | 219 | 1 200 | 26.7 | 134 | 288 | 46.9 A | 1 820 | 7 370 | 5 |
| 6 | 57.4 | 173 S | 858 | 25.5 | 145 S | 319 | 48.5 A | 1 180 S | 4 740 | 6 |
| 7 | 48.3 | 133 | 587 | 25.2 | 152 | 331 | 47.7 E | 731 | 2 890 | 7 |
| 8 | 46.8 | 89 S | 388 | 25.3 | 158 | 346 | 44.9 A | 442 S | 1 710 | 8 |
| 9 | 44.3 | 101 | 387 | 25.1 | 163 | 383 | 39.4 A | 447 | 1 520 | 9 |
| 10 | 42.8 | 121 S | 447 | 26.2 | 169 | 383 | 34.9 A | 487 S | 1 500 | 10 |
| 11 | 43.7 | 170 | 642 | 27.0 | 167 | 390 | 40.3 A | 383 | 1 370 | 11 |
| 12 | 51.8 | 348 S | 1 560 | 26.3 | 145 | 329 | 42.3 A | 276 S | 1 010 | 12 |
| 13 | 55.2 | 885 | 4 220 | 25.7 | 113 | 251 | 42.5 A | 220 | 808 | 13 |
| 14 | 52.8 | 1 580 S | 7 210 | 24.8 | 80 S | 171 | 42.8 A | 185 S | 684 | 14 |
| 15 | 50.0 | 1 850 | 7 130 | 24.3 | 84 | 134 | 42.6 | 163 | 582 | 15 |
| 16 | 57.0 | 1 230 | 6 060 | 24.1 | 83 | 131 | 37.4 | 121 E | 391 | 16 |
| 17 | 80.1 | 821 | 4 280 | 24.4 | 83 | 133 | 32.6 | 104 | 293 | 17 |
| 18 | 59.6 | 523 S | 2 690 | 24.0 | 88 | 141 | 31.9 | 101 | 278 | 18 |
| 19 | 57.1 | 390 | 1 930 | 26.7 | 123 | 284 | 35.3 | 107 | 326 | 19 |
| 20 | 53.8 | 282 | 1 380 | 29.3 | 174 S | 440 | 36.7 | 108 S | 336 | 20 |
| 21 | 51.1 | 233 S | 1 030 | 24.6 | 121 | 257 | 37.3 | 95 | 306 | 21 |
| 22 | 47.0 | 190 | 772 | 21.8 | 93 | 176 | 38.2 | 95 S | 314 | 22 |
| 23 | 45.5 | 167 S | 657 | 21.3 | 87 | 123 | 40.8 | 94 | 331 | 23 |
| 24 | 46.4 | 319 | 1 280 | 22.2 | 80 S | 95.8 | 40.4 | 95 S | 332 | 24 |
| 25 | 46.8 | 419 S | 1 660 | 24.5 | 104 | 220 | 38.9 | 97 | 326 | 25 |
| 26 | 46.8 | 253 S | 1 070 | 27.6 | 157 | 374 | 36.7 | 100 S | 334 | 26 |
| 27 | 45.1 | 341 | 1 330 | 26.7 | 172 | 397 | 36.4 | 101 | 335 | 27 |
| 28 | 39.2 | 582 S | 1 970 | 24.8 | 136 S | 293 | 34.4 | 97 S | 288 | 28 |
| 29 | 35.0 | 597 | 1 810 | 23.3 | 132 | 266 | 30.7 | 91 | 241 | 29 |
| 30 | 32.1 | 471 S | 1 310 | 26.8 | 268 | 597 | 26.2 | 87 S | 212 | 30 |
| 31 | | | | 34.4 | 564 | 1 880 | 27.4 | 84 | 199 | 31 |
| TOTAL | 1 535.7 | | 59 899 | 801.4 | | 11 022.9 | 1 249.8 | | 85 008 | TOTAL |

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

RED DEER RIVER NEAR BINDLOSS - STATION NO. 05CK004

SUSPENDED SEDIMENT FOR 1984

| DAY | SEP DAILY DISCHARGE ($m^3/s$) | SEP MEAN CONCENTRATION (mg/L) | SEP DAILY LOAD (t) | OCT DAILY DISCHARGE ($m^3/s$) | OCT MEAN CONCENTRATION (mg/L) | OCT DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 27.1 | 74 S | 173 | 40.8 | 284 | 1 030 | | | | 1 |
| 2 | 27.0 | 78 | 184 | 40.1 | 181 S | 627 | | | | 2 |
| 3 | 26.8 | 87 | 202 | 38.0 | 166 | 858 | | | | 3 |
| 4 | 27.3 | 104 | 245 | 38.3 | 149 S | 493 | | | | 4 |
| 5 | 33.8 | 235 | 988 | 37.5 | 131 | 424 | | | | 5 |
| 6 | 37.5 | 288 | 933 | 36.9 | 112 S | 357 | | | | 6 |
| 7 | 34.6 | 278 | 834 | 35.4 | 105 | 321 | | | | 7 |
| 8 | 33.3 | 254 | 731 | 35.2 | 105 S | 319 | | | | 8 |
| 9 | 32.1 | 144 S | 388 | 34.4 | 101 | 300 | | | | 9 |
| 10 | 30.8 | 204 | 545 | 33.2 | 94 | 270 | | | | 10 |
| 11 | 39.8 | 418 S | 1 430 | 31.0 | 80 S | 214 | | | | 11 |
| 12 | 35.7 | 484 S | 1 430 | 30.3 | 72 | 188 | | | | 12 |
| 13 | 39.3 | 1 870 | 6 350 | 28.4 | 73 | 185 | | | | 13 |
| 14 | 41.1 | 4 700 S | 16 700 | 28.1 | 83 | 209 | | | | 14 |
| 15 | 40.0 | 5 230 | 18 100 | 31.5 | 93 S | 253 | | | | 15 |
| 16 | 37.7 | 2 800 | 9 450 | 33.1 | 110 | 315 | | | | 16 |
| 17 | 36.5 | 1 200 S | 3 780 | 34.1 | 124 S | 385 | | | | 17 |
| 18 | 34.2 | 1 310 S | 3 870 | 35.5 | 135 | 414 | | | | 18 |
| 19 | 32.4 | 1 290 S | 3 610 | 35.5 | 143 S | 439 | | | | 19 |
| 20 | 30.3 | 722 | 1 890 | 33.7 | 132 E | 384 | | | | 20 |
| 21 | 30.0 | 397 S | 1 030 | 33.4 | 121 E | 349 | | | | 21 |
| 22 | 29.2 | 379 | 958 | 31.1 | 110 E | 296 | | | | 22 |
| 23 | 29.9 | 425 S | 1 100 | 28.6 | 99 E | 245 | | | | 23 |
| 24 | 34.9 | 1 310 | 3 950 | 26.5 | 88 E | 201 | | | | 24 |
| 25 | 51.7 | 2 910 | 13 000 | 26.5 | 77 E | 176 | | | | 25 |
| 26 | 52.7 | 2 580 S | 11 700 | 28.3 | 86 E | 161 | | | | 26 |
| 27 | 48.3 | 2 280 | 9 580 | 27.6 | 85 E | 131 | | | | 27 |
| 28 | 49.8 | 4 140 S | 17 800 | 25.9 B | 44 E | 98.5 | | | | 28 |
| 29 | 51.7 | 3 780 | 16 800 | 23.5 B | 33 E | 67.0 | | | | 29 |
| 30 | 43.6 | 1 080 S | 4 110 | 15.0 B | 22 E | 28.5 | | | | 30 |
| 31 | | | | 12.0 B | 11 E | 11.4 | | | | 31 |
| TOTAL | 1 099.3 | | 151 548 | 972.2 | | 9 430.4 | | | | TOTAL |

B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

RED DEER RIVER NEAR BINDLOSS - STATION NO. 05CK004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | | INSTANT. CONCENT. (mg/L) | | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 30 | 16:00 | 2.0 | 53.0 | W | 915 | | MID | 42 | 52 | 57 | 64 | 68 | 73 | 78 | 93 | 98 | 100 | | 182 | 27 | 21 | 52 | DH59 |
| APR 01 | 18:00 | 4.0 | 56.3 | | 538 | | MID | | | | | | | | | | | | 301 | | | | DH59 |
| APR 01 | 18:01 | 4.0 | 56.3 | | 578 | | MID | | | | | | | | | | | | 298 | | | | DH59 |
| APR 03 | 10:30 | 5.0 | 48.4 | | 318 | | MID | | | | | | | | | | | | 322 | | | | DH59 |
| APR 03 | 10:31 | 5.0 | 48.4 | | 301 | | MID | | | | | | | | | | | | 327 | | | | DH59 |
| APR 05 | 18:00 | 7.0 | 51.4 | | 478 | | MID | | | | | | | | | | | | 301 | | | | DH59 |
| APR 05 | 18:01 | 7.0 | 51.4 | | 461 | | MID | | | | | | | | | | | | 297 | | | | DH59 |
| APR 07 | 17:00 | 9.0 | 58.5 | | 273 | | MID | | | | | | | | | | | | 282 | | | | DH59 |
| APR 07 | 17:01 | 9.0 | 58.5 | | 414 | C | MID | | | | | | | | | | | | 281 | | | | DH59 |
| APR 09 | 14:30 | 9.0 | 55.2 | | 335 | C | MID | | | | | | | | | | | | | | | | DH59 |
| APR 11 | 16:00 | 9.0 | 50.6 | | 243 | | MID | | | | | | | | | | | | | | | | DH59 |
| APR 13 | 12:30 | 10.0 | 47.7 | | 185 | | MID | | | | | | | | | | | | | | | | DH59 |
| APR 16 | 16:00 | 22.0 | 36.2 | | 83 | | MID | | | | | | | | | | | | 306 | | | | DH59 |
| APR 17 | 18:30 | 11.0 | 33.7 | | 86 | | MID | | | | | | | | | | | | | | | | DH59 |
| APR 19 | 13:00 | 14.0 | 31.2 | | 63 | | MID | | | | | | | | | | | | | | | | DH59 |
| APR 21 | 12:00 | 15.0 | 29.6 | | 79 | | MID | | | | | | | | | | | | | | | | DH59 |
| APR 23 | 16:00 | 13.0 | 28.3 | | 98 | | MID | | | | | | | | | | | | 323 | | | | DH59 |
| APR 25 | 13:00 | 6.0 | 27.5 | | 491 | | MID | | | | | | | | | | | | 328 | | | | DH59 |
| APR 25 | 13:01 | 6.0 | 27.5 | | 512 | | MID | | | | | | | | | | | | 330 | | | | DH59 |
| APR 27 | 16:00 | 8.0 | 24.7 | | 116 | | MID | | | | | | | | | | | | | | | | DH59 |
| APR 28 | 12:00 | 8.0 | 24.5 | | 121 | | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 01 | 10:30 | 10.0 | 24.6 | | 111 | C | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 03 | 16:00 | | 22.4 | | 142 | C | MID | | | | | | | | | | | | 342 | | | | DH59 |
| MAY 05 | 14:30 | 13.0 | 21.9 | | 88 | C | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 07 | 18:00 | 12.0 | 22.4 | | 448 | | MID | | | | | | | | | | | | 311 | | | | DH59 |
| MAY 07 | 18:01 | 12.0 | 22.4 | | 373 | | MID | | | | | | | | | | | | 314 | | | | DH59 |
| MAY 08 | 15:40 | 13.0 | 27.7 | | 105 | | MID | | | | | | | | | | | | 336 | | | | DH59 |
| MAY 09 | 11:30 | 12.0 | 33.6 | | 171 | | MID | | | | | | | | | | | | 327 | | | | DH59 |
| MAY 09 | 11:31 | 12.0 | 33.6 | | 178 | | MID | | | | | | | | | | | | 343 | | | | DH59 |
| MAY 11 | 12:00 | 11.0 | 33.4 | V | 445 | | MID | | | | | | | | | | | | 311 | | | | DH59 |
| MAY 11 | 12:01 | 11.0 | 33.4 | V | 402 | | MID | | | | | | | | | | | | 317 | | | | DH59 |
| MAY 13 | 20:00 | 17.0 | 41.2 | V | 232 | | MID | | | | | | | | | | | | 348 | | | | DH59 |
| MAY 13 | 20:01 | 17.0 | 41.2 | V | 253 | | MID | | | | | | | | | | | | 340 | | | | DH59 |
| MAY 14 | 16:30 | 17.0 | 44.3 | | 189 | | MID | | | | | | | | | | | | 320 | | | | DH59 |
| MAY 14 | 16:31 | 17.0 | 44.3 | | 193 | | MID | | | | | | | | | | | | 324 | | | | DH59 |
| MAY 15 | 15:30 | 20.0 | 42.0 | | 186 | C | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 17 | 15:00 | 18.0 | 37.2 | | 97 | C | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 19 | 11:30 | 16.0 | 34.7 | | 136 | | MID | | | | | | | | | | | | 320 | | | | DH59 |
| MAY 23 | 12:30 | 13.0 | 58.7 | | 335 | C | MID | | | | | | | | | | | | 314 | | | | DH59 |
| MAY 26 | 11:30 | 11.0 | 80.6 | | 394 | C | MID | | | | | | | | | | | | 285 | | | | DH59 |
| MAY 27 | 11:30 | 12.0 | 73.8 | | 214 | C | MID | | | | | | | | | | | | 289 | | | | DH59 |
| MAY 28 | 12:00 | 16.0 | 73.7 | | 211 | C | MID | | | | | | | | | | | | 288 | | | | DH59 |
| MAY 31 | 12:00 | 16.0 | 57.8 | | 804 | | MID | 22 | 44 | 50 | 65 | 68 | 72 | 80 | 97 | 100 | | | 284 | 28 | 28 | 44 | DH59 |
| JUN 01 | 10:30 | 12.0 | 55.7 | | 477 | | MID | | | | | | | | | | | | 297 | | | | DH59 |
| JUN 01 | 10:31 | 12.0 | 55.7 | | 307 | | MID | | | | | | | | | | | | 301 | | | | DH59 |
| JUN 04 | 12:00 | 17.0 | 53.8 | | 214 | | MID | | | | | | | | | | | | 292 | | | | DH59 |
| JUN 04 | 15:45 | 17.0 | 52.1 | | 250 | | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 06 | 18:30 | 20.0 | 55.4 | | 163 | | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 08 | 10:00 | 15.0 | 46.8 | | 88 | | MID | | | | | | | | | | | | 289 | | | | DH59 |
| JUN 08 | 10:01 | 15.0 | 46.8 | | 93 | | MID | | | | | | | | | | | | 297 | | | | DH59 |
| JUN 10 | 17:00 | 17.0 | 42.4 | | 128 | | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 12 | 15:00 | 20.0 | 53.9 | | 384 | | MID | 27 | 50 | 62 | 73 | 78 | 80 | 85 | 96 | 100 | | | 319 | 20 | 30 | 50 | DH59 |
| JUN 14 | 19:00 | 20.0 | 52.1 | | 1790 | | MID | 22 | 58 | 94 | 95 | 95 | 96 | 97 | 99 | 100 | | | 329 | 4 | 8 | 88 | DH59 |
| JUN 14 | 19:01 | 20.0 | 52.1 | | 1750 | | MID | 24 | 43 | 96 | 96 | 96 | 97 | 96 | 100 | | | | 330 | 3 | 54 | 43 | DH59 |
| JUN 16 | 14:00 | 20.0 | 59.6 | | 501 | | MID | | | | | | | | | | | | 297 | | | | DH59 |
| JUN 16 | 14:01 | 20.0 | 59.6 | | 517 | | MID | | | | | | | | | | | | 300 | | | | DH59 |
| JUN 21 | 18:30 | 15.0 | 48.6 | | 213 | | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 23 | 08:45 | 15.0 | 44.9 | | 181 | | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 25 | 15:20 | 23.0 | 46.3 | | 389 | | MID | | | | | | | | | | | | 295 | | | | DH59 |
| JUN 25 | 15:21 | 23.0 | 46.3 | | 396 | | MID | | | | | | | | | | | | 288 | | | | DH59 |
| JUN 26 | 12:00 | 21.0 | 49.6 | | 235 | | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 28 | 18:00 | 27.0 | 37.6 | | 655 | | MID | 12 | 34 | 83 | 96 | 96 | 97 | 98 | 100 | | | | 308 | 3 | 63 | 34 | DH59 |
| JUN 30 | 15:00 | 19.0 | 31.6 | | 457 | | MID | 20 | 46 | 66 | 91 | 92 | 94 | 97 | 100 | | | | 308 | 6 | 46 | 46 | DH59 |
| JUL 02 | 12:00 | 19.0 | 29.0 | | 208 | | MID | | | | | | | | | | | | 304 | | | | DH59 |
| JUL 06 | 20:00 | 20.0 | 25.6 | | 153 | | MID | | | | | | | | | | | | | | | | DH59 |
| JUL 14 | 19:30 | 20.0 | 24.5 | | 87 | | MID | | | | | | | | | | | | | | | | DH59 |
| JUL 20 | 17:45 | 25.0 | 28.1 | | 156 | | MID | | | | | | | | | | | | | | | | DH59 |
| JUL 24 | 16:45 | 25.0 | 22.6 | | 48 | | MID | | | | | | | | | | | | 282 | | | | DH59 |
| JUL 28 | 18:00 | 29.0 | 24.5 | | 116 | | MID | | | | | | | | | | | | 282 | | | | DH59 |
| AUG 02 | 18:00 | 28.0 | 62.5 | | 2080 | | MID | 58 | 73 | 82 | 88 | 91 | 92 | 93 | 98 | 100 | | | 285 | 8 | 19 | 73 | DH59 |
| AUG 02 | 18:01 | 28.0 | 62.5 | | 2020 | | MID | 57 | 71 | 81 | 87 | 90 | 91 | 93 | 98 | 100 | | | 277 | 9 | 20 | 71 | DH59 |
| AUG 04 | 17:00 | 27.0 | 47.8 | | 2380 | | MID | 74 | 90 | 93 | 98 | 98 | 99 | 99 | 100 | | | | 328 | 1 | 9 | 90 | DH59 |
| AUG 04 | 17:01 | 27.0 | 47.9 | | 2410 | | MID | 73 | 88 | 94 | 97 | 98 | 99 | 99 | 100 | | | | 337 | 1 | 11 | 88 | DH59 |
| AUG 06 | 18:30 | 28.0 | 48.5 | V | 1020 | | MID | 23 | 71 | 93 | 95 | 97 | 98 | 99 | 100 | | | | 284 | 2 | 27 | 71 | DH59 |
| AUG 08 | 11:30 | 20.0 | 44.9 | V | 426 | | MID | | | | | | | | | | | | 281 | | | | DH59 |
| AUG 08 | 11:31 | 20.0 | 44.9 | V | 441 | | MID | | | | | | | | | | | | 287 | | | | DH59 |
| AUG 10 | 18:00 | 27.0 | 34.9 | V | 488 | | MID | | | | | | | | | | | | 289 | | | | DH59 |
| AUG 10 | 18:01 | 27.0 | 34.8 | V | 489 | | MID | | | | | | | | | | | | 281 | | | | DH59 |
| AUG 12 | 14:00 | 25.0 | 42.3 | V | 253 | | MID | | | | | | | | | | | | 335 | | | | DH59 |
| AUG 12 | 14:01 | 25.0 | 42.3 | V | 280 | | MID | | | | | | | | | | | | 336 | | | | DH59 |
| AUG 14 | 12:00 | 20.0 | 42.6 | | 185 | | MID | | | | | | | | | | | | 322 | | | | DH59 |
| AUG 18 | 18:00 | 24.0 | 36.3 | | 111 | | MID | | | | | | | | | | | | | | | | DH59 |
| AUG 20 | 12:00 | 18.0 | 37.3 | | 107 | | MID | | | | | | | | | | | | | | | | DH59 |
| AUG 22 | 20:00 | 23.0 | 38.2 | | 80 | | MID | | | | | | | | | | | | | | | | DH59 |
| AUG 24 | 11:00 | 20.0 | 40.6 | | 87 | | MID | | | | | | | | | | | | 210 | | | | DH59 |
| AUG 26 | 12:00 | 18.0 | 38.0 | | 84 | | MID | | | | | | | | | | | | | | | | DH59 |
| AUG 28 | 11:30 | 16.0 | 34.2 | | 87 | | MID | | | | | | | | | | | | | | | | DH59 |
| AUG 30 | 17:30 | 17.0 | 28.0 | | 78 | | MID | | | | | | | | | | | | 240 | | | | DH59 |
| SEP 01 | 12:00 | 16.0 | 27.3 | | 78 | | MID | | | | | | | | | | | | 240 | | | | DH59 |
| SEP 01 | 18:01 | 16.0 | 27.3 | | 85 | | MID | | | | | | | | | | | | 241 | | | | DH59 |
| SEP 09 | 15:30 | 13.0 | 32.1 | | 126 | | MID | | | | | | | | | | | | | | | | DH59 |
| SEP 11 | 11:05 | 11.0 | 40.6 | | 330 | | MID | | | | | | | | | | | | 258 | | | | DH59 |
| SEP 12 | 18:00 | 11.0 | 33.6 | | 419 | | MID | | | | | | | | | | | | | | | | DH59 |
| SEP 14 | 16:00 | 14.0 | 42.1 | | 5580 | | MID | 78 | 92 | 96 | 97 | 98 | 98 | 99 | 100 | | | | 258 | 2 | 8 | 92 | DH59 |
| SEP 14 | 16:01 | 14.0 | 42.1 | | 5910 | | MID | 61 | 83 | 88 | 88 | 89 | 73 | 78 | 96 | 100 | | | 271 | 27 | 10 | 63 | DH59 |
| SEP 17 | 17:00 | 18.0 | 36.0 | | 1030 | | MID | | | | | | | | | | | | 234 | | | | DH59 |
| SEP 17 | 17:01 | 18.0 | 36.0 | | 1000 | | MID | | | | | | | | | | | | 256 | | | | DH59 |
| SEP 18 | 11:30 | 15.0 | 34.2 | | 1330 | | MID | 82 | 77 | 80 | 83 | 84 | 86 | 82 | 98 | 100 | | | 285 | 12 | 11 | 77 | DH59 |
| SEP 18 | 11:31 | 15.0 | 34.2 | | 1330 | | MID | 84 | 77 | 81 | 84 | 85 | 87 | 81 | 98 | 100 | | | 285 | 13 | 10 | 77 | DH59 |
| SEP 18 | 18:00 | 15.0 | 32.7 | | 1240 | | MID | 81 | 86 | 95 | 96 | 97 | 98 | 98 | 100 | | | | 287 | 2 | 10 | 88 | DH59 |
| SEP 18 | 18:01 | 15.0 | 32.7 | | 1250 | | MID | 78 | 89 | 93 | 96 | 96 | 98 | 99 | 100 | | | | 283 | 2 | 9 | 89 | DH59 |
| SEP 21 | 18:00 | 10.0 | 31.0 | | 380 | | MID | | | | | | | | | | | | | | | | DH59 |
| SEP 23 | 15:00 | 8.0 | 31.6 | | 373 | | MID | | | | | | | | | | | | | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): V - DAILY MEAN; MANUAL GAUGE W - DAILY MEAN; ICE CONDITIONS
CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

CONTINUED

RED DEER RIVER NEAR BINDLOSS - STATION NO. 05CK004 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SEP 28 | 15:00 | 8.0 | 58.8 | 2340 | MID | 13 | 15 | 18 | 20 | 30 | 45 | 81 | 93 | 99 | 100 | | 250 | 55 | 30 | 15 | DH59 |
| SEP 28 | 15:01 | 8.0 | 58.8 | 2300 | MID | 81 | 73 | 80 | 83 | 84 | 88 | 88 | 97 | 100 | | | 257 | 14 | 13 | 73 | DH59 |
| SEP 28 | 10:17 | 4.0 | 48.3 | 4180 | MID | 84 | 78 | 81 | 84 | 85 | 86 | 88 | 97 | 100 | | | 290 | 14 | 7 | 79 | DH59 |
| SEP 28 | 10:18 | 4.0 | 48.3 | 4100 | MID | 24 | 31 | 35 | 38 | 40 | 47 | 80 | 90 | 99 | 100 | | 288 | 53 | 16 | 31 | DH59 |
| SEP 30 | 17:00 | 10.0 | 42.2 | 858 | MID | | | | | | | | | | | | 288 | | | | DH59 |
| OCT 02 | 13:28 | 8.0 | 40.2 | 177 | MID | | | | | | | | | | | | | | | | DH59 |
| OCT 04 | 18:00 | 14.0 | 38.3 | 143 | MID | | | | | | | | | | | | | | | | DH59 |
| OCT 06 | 18:00 | 14.0 | 36.9 | 106 | MID | | | | | | | | | | | | | | | | DH59 |
| OCT 08 | 15:00 | 15.0 | 35.4 | 108 | MID | | | | | | | | | | | | | | | | DH59 |
| OCT 11 | 18:00 | 15.0 | 30.8 | 74 | MID | | | | | | | | | | | | | | | | DH59 |
| OCT 15 | 14:00 | 8.0 | 31.8 | 98 | MID | | | | | | | | | | | | | | | | DH59 |
| OCT 17 | 14:00 | 3.0 | 34.3 | 124 | MID | | | | | | | | | | | | | | | | DH59 |
| OCT 19 | 09:00 | 0.0 | 35.3 | 143 | MID | | | | | | | | | | | | | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

RED DEER RIVER NEAR BINDLOSS - STATION NO. 05CK004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | | | MINIMUM (mg/L) | | | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | | | TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1966 | MAY-DEC | M-S | 11 | 800 | JUL 08 | * | 35 | NOV 03 | | | 296 | 000 | JUL 07 | | 1 | 850 | 000 | --- | --- | --- |
| 1967 | JAN-DEC | M-C | 5 | 000 | JUN 04 | | 2 | JAN 24 | | | 200 | 000 | JUN 04 | | 2 | 410 | 000 | 9 | 810 | 9 | 810 | --- |
| 1968 | JAN-DEC | M-C | 5 | 830 | JUL 25 | | 11 | DEC 10 | | | 70 | 300 | JUL 25 | | | 843 | 000 | 3 | 420 | 6 | 820 | 48.3 |
| 1969 | JAN-DEC | M-C | 8 | 840 | APR 08 | | 1 | MAR 11 | | * | 377 | 000 | APR 09 | | 4 | 710 | 000 | 10 | 200 | 10 | 800 | 42.4 |
| 1970 | JAN-DEC | M-C | 11 | 300 | JUN 18 | | 11 | MAR 18 | | | 345 | 000 | JUN 18 | | 2 | 930 | 000 | 11 | 900 | 11 | 100 | 28.3 |
| 1971 | JAN-DEC | M-C | 7 | 710 | APR 18 | | 14 | NOV 18 | | | 517 | 000 | APR 18 | * | 4 | 810 | 000 | 18 | 800 | 12 | 800 | 23.4 |
| 1972 | JAN-DEC | M-C | 4 | 390 | JUN 29 | | 9 | NOV 27 | | | 195 | 000 | JUN 29 | | 1 | 800 | 000 | 6 | 500 | 11 | 800 | 22.6 |
| 1973 | JAN-DEC | M-C | 8 | 470 | JUN 19 | | 7 | FEB 23 | | | 122 | 000 | JUN 19 | | 1 | 570 | 000 | 6 | 400 | 10 | 900 | 21.4 |
| 1974 | JAN-DEC | M-C | 8 | 700 | APR 18 | | 5 | FEB 18 | | | 344 | 000 | APR 19 | | 5 | 280 | 000 | * | 21 | 800 | 12 | 200 | 19.8 |
| 1975 | JAN-DEC | M-C | 4 | 780 | APR 24 | | 12 | DEC 17 | | | 155 | 000 | APR 24 | | 1 | 140 | 000 | | 4 | 550 | 11 | 400 | 20.1 |
| 1976 | JAN-DEC | M-C | 8 | 650 | AUG 19 | | 4 | JAN 28 | | | 138 | 000 | AUG 19 | | | 887 | 000 | | 3 | 610 | 10 | 800 | 20.7 |
| 1977 | JAN-DEC | M-C | 8 | 020 | SEP 24 | | 7 | FEB 07 | | | 84 | 600 | SEP 23 | | | 585 | 000 | | 2 | 370 | 9 | 830 | 21.8 |
| 1978 | JAN-DEC | M-C | 8 | 380 | SEP 14 | | 11 | DEC 13 | | | 85 | 900 | APR 02 | | 1 | 540 | 000 | | 6 | 880 | 9 | 570 | 20.4 |
| 1979 | JAN-OCT | M-S | 2 | 120 | AUG 08 | | 10 | JAN 02 | | | 10 | 300 | AUG 08 | | | 305 | 000 | | 1 | 240 | 8 | 930 | 21.3 |
| 1980 | MAR-OCT | M-S | 5 | 070 | AUG 10 | | 35 | MAY 12 | | | 89 | 600 | APR 16 | | 1 | 650 | 000 | | 7 | 550 | 8 | 830 | 20.0 |
| 1981 | MAR-NOV | M-S | 5 | 440 | MAY 11 | | 21 | OCT 27 | | | 128 | 000 | AUG 04 | | 1 | 710 | 000 | | --- | | --- | | --- |
| 1982 | APR-NOV | M-S | 5 | 080 | SEP 28 | | 56 | SEP 16 | | | 83 | 800 | JUL 08 | | 1 | 750 | 000 | | --- | | --- | | --- |
| 1983 | MAR-OCT | # M-S | 3 | 340 | JUL 05 | | 16 | OCT 31 | | | 42 | 300 | JUL 12 | | | 509 | 000 | | --- | | --- | | --- |
| 1984 | MAR-OCT | M-S | 5 | 810 | SEP 14 | | 46 | JUL 24 | | | 18 | 100 | SEP 15 | | | 388 | 000 | | --- | | --- | | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

REDWATER RIVER NEAR REDWATER - STATION NO. 05EC003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | | | MINIMUM (mg/L) | | | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | AUG-SEP # | M-MS | 12 | AUG 15 | | | 11 | SEP 19 | | | --- | --- | --- | --- | --- |
| 1976 | APR-JUN # | M-MS | 44 | APR 14 | | * | 4 | JUN 16 | | * | --- | --- | --- | --- | --- |
| 1977 | APR-APR # | M-MS | 42 | APR 11 | | | 32 | APR 05 | | | --- | --- | --- | --- | --- |
| 1978 | JUN-JUN | M-MS | 7 | JUN 20 | | | 7 | JUN 20 | | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## REVILLON COUPE BELOW RIVIERE DES ROCHERS - STATION NO. 07NA004

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | JUN-OCT # | M-MS | 2 900 | JUN 25 * | 84 | AUG 28 | --- | --- | --- | --- | --- |
| 1972 | JUN-AUG # | M-MS | 708 | JUL 21 | 30 | AUG 21 | --- | --- | --- | --- | --- |
| 1973 | MAY-OCT # | M-MS | 387 | JUN 27 | 28 | OCT 15 * | --- | --- | --- | --- | --- |
| 1975 | MAY-OCT # | M-MS | 214 | OCT 22 | 95 | JUN 04 | --- | --- | --- | --- | --- |
| 1976 | MAY-OCT # | M-MS | 1 290 | JUL 08 | 37 | JUN 22 | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 978 | JUN 18 | 40 | JUL 27 | --- | --- | --- | --- | --- |
| 1978 | JUN-OCT # | M-MS | 135 | JUN 28 | 28 | AUG 23 | --- | --- | --- | --- | --- |
| 1979 | JUL-OCT # | M-MS | 343 | JUL 18 | 87 | AUG 28 | --- | --- | --- | --- | --- |
| 1980 | JUN-OCT # | M-MS | 382 | JUL 08 | 40 | JUN 11 | --- | --- | --- | --- | --- |
| 1981 | JUN-OCT # | M-MS | 110 | JUL 09 | 31 | AUG 05 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## RIVIERE DES ROCHERS AT BEN HOULE'S CABIN - STATION NO. 07NA002

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | JUN-SEP # | M-MS | 2 770 | SEP 08 * | 87 | JUN 04 | --- | --- | --- | --- | --- |
| 1972 | JUN-AUG # | M-MS | 393 | JUL 14 | 41 | AUG 21 | --- | --- | --- | --- | --- |
| 1973 | MAY-OCT # | M-MS | 387 | JUN 27 | 26 | OCT 15 | --- | --- | --- | --- | --- |
| 1974 | AUG-NOV # | M-MS | 129 | OCT 07 | 40 | AUG 26 | --- | --- | --- | --- | --- |
| 1975 | MAY-OCT # | M-MS | 205 | SEP 09 | 40 | AUG 15 | --- | --- | --- | --- | --- |
| 1976 | MAY-OCT # | M-MS | 205 | JUL 08 | 37 | JUN 22 | --- | --- | --- | --- | --- |
| 1977 | MAY-OCT # | M-MS | 351 | MAY 17 | 23 | SEP 08 * | --- | --- | --- | --- | --- |
| 1978 | JUN-OCT # | M-MS | 175 | OCT 04 | 28 | AUG 23 | --- | --- | --- | --- | --- |
| 1979 | JUN-OCT # | M-MS | 91 | JUN 20 | 48 | AUG 29 | --- | --- | --- | --- | --- |
| 1980 | JUN-OCT # | M-MS | 183 | JUL 09 | 58 | JUN 11 | --- | --- | --- | --- | --- |
| 1981 | JUN-AUG # | M-MS | 134 | JUL 08 | 33 | AUG 08 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## ROCKY CREEK NEAR VALLEYVIEW - STATION NO. 07CF008

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1968 | JAN-OCT | M-S | 18 | JUN 11 | 1 | MAY 16 | 1.10 | JUN 14 | 4.07 | | 0.02 | 0.02 | --- |
| 1969 | MAR-OCT | M-S | 34 | AUG 15 | 10 | JUL 22 | 0.43 | APR 29 | 4.18 | | 0.02 | 0.02 | 0.0 |
| 1970 | MAR-OCT | M-S | 48 | APR 20 | 0 | AUG 31 * | 2.14 | APR 21 | 12.0 | | 0.05 | 0.03 | 33.3 |
| 1971 | MAR-OCT | M-S | 42 | APR 23 | 0 | MAY 17 | 4.01 | JUL 12 | 30.1 | | 0.09 | 0.05 | 33.7 |
| 1972 | MAR-OCT | M-S | 36 | JUN 07 | 3 | MAY 19 | 3.52 | APR 28 | 26.5 | | 0.11 | 0.06 | 30.5 |
| 1973 | MAR-NOV | M-S | 35 | APR 05 | 5 | NOV 06 | 4.20 | JUN 11 | 33.5 | | 0.10 | 0.07 | 33.8 |
| 1974 | MAR-OCT | M-S | 118 | APR 19 | 4 | MAY 06 | 8.57 | APR 19 * | 43.2 | * | 0.18 | 0.08 | 28.9 |
| 1975 | MAY-JUL # | M-MS | 17 | MAY 29 | 8 | JUL 09 | --- | | --- | | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 154 | APR 27 * | 3 | OCT 17 | --- | | --- | | --- | --- | --- |
| 1979 | MAY-AUG # | M-MS | 144 | MAY 15 | 14 | JUN 05 | --- | | --- | | --- | --- | --- |
| 1980 | SEP-NOV # | M-MS | 8 | SEP 18 | 3 | NOV 05 | --- | | --- | | --- | --- | --- |
| 1981 | MAR-NOV # | M-MS | 79 | NOV 09 | 7 | APR 15 | --- | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

SAKWATAMAU RIVER NEAR WHITECOURT - STATION NO. 07AH003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM | | MINIMUM | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY | TOTAL FOR PERIOD | SUMMARY : MEAN LOAD | HISTORICAL MEAN LOAD | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/L) | | (mg/L) | | (TONNES) | (TONNES) | (TONNES) | (TONNES) | |
| 1979 | MAY-MAY # | M-MS | 408 | MAY 02 * | 85 | MAY 28 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

SAND RIVER NEAR THE MOUTH - STATION NO. 08AB001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 08 | 15:20 | 1.0 | 10.4 | 152 | 32.0 | | | | | | | | | | | | 203 | | | | DH59 |
| MAY 02 | 12:30 | 8.0 | 7.08 | 12 | MID | | | | | | | | | | | | 174 | | | | DH48 |
| JUN 07 | 15:45 | 15.0 | 44.3 | 180 | 32.0 | | | | | | | | | | | | 147 | | | | DH59 |
| AUG 30 | 11:35 | 13.0 | 2.88 | 8 | MID | | | | | | | | | | | | 188 | | | | DH48 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

SAND RIVER NEAR THE MOUTH - STATION NO. 08AB001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM | | MINIMUM | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY | TOTAL FOR PERIOD | SUMMARY : MEAN LOAD | HISTORICAL MEAN LOAD | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/L) | | (mg/L) | | (TONNES) | (TONNES) | (TONNES) | (TONNES) | |
| 1984 | APR-AUG | M-MS | 180 | JUN 07 * | 8 | AUG 30 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

SAWRIDGE CREEK NEAR SLAVE LAKE - STATION NO. 07BK009

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM | | MINIMUM | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY | TOTAL FOR PERIOD | SUMMARY : MEAN LOAD | HISTORICAL MEAN LOAD | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg/L) | | (mg/L) | | (TONNES) | (TONNES) | (TONNES) | (TONNES) | |
| 1978 | OCT-OCT | M-MS | 38 | OCT 11 * | 38 | OCT 11 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

SEVEN PERSONS CREEK AT MEDICINE HAT - STATION NO. 05AH008

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1979 | JUL-JUL | M-MS | 30 | JUL 31 * | 30 | JUL 31 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

SHEEP RIVER AT BLACK DIAMOND - STATION NO. 05BL014

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 02 | 16:30 | 8.0 | 1.79 | | 5 | MID | | | | | | | | | | | | 215 | | | | DIP |
| MAY 28 | 16:35 | 14.0 | 4.03 | | 8 | MID | | | | | | | | | | | | 205 | | | | DH48 |
| JUN 09 | 12:00 | 8.0 | 11.8 | H | 91 | MID | | | | | | | | | | | | 184 | | | | DH48 |
| AUG 01 | 16:45 | 20.0 | 2.85 | | 5 | MID | | | | | | | | | | | | 208 | | | | DIP |
| SEP 05 | 16:15 | 15.0 | 1.48 | | 3 | MID | | | | | | | | | | | | 212 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): H - DAILY MEAN

SHEEP RIVER AT BLACK DIAMOND - STATION NO. 05BL014

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | JUL-NOV # | M-MS | 4 | JUL 29 | 1 | OCT 01 | --- | --- | --- | --- | --- |
| 1975 | APR-OCT # | M-MS | 180 | JUN 28 | 1 | SEP 29 | --- | --- | --- | --- | --- |
| 1976 | APR-SEP # | M-MS | 2 730 | AUG 05 * | 0 | SEP 24 * | --- | --- | --- | --- | --- |
| 1977 | APR-SEP # | M-MS | 80 | SEP 28 | 1 | JUL 25 | --- | --- | --- | --- | --- |
| 1978 | MAY-SEP # | M-MS | 727 | JUN 08 | 3 | SEP 25 | --- | --- | --- | --- | --- |
| 1979 | APR-SEP # | M-MS | 21 | MAY 30 | 0 | AUG 20 | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 1 340 | MAY 28 | 1 | OCT 08 | --- | --- | --- | --- | --- |
| 1981 | MAR-SEP # | M-MS | 1 410 | MAY 26 | 6 | SEP 28 | --- | --- | --- | --- | --- |
| 1982 | APR-SEP # | M-MS | 137 | MAY 28 | 2 | AUG 23 | --- | --- | --- | --- | --- |
| 1983 | MAY-SEP # | M-MS | 129 | MAY 30 | 1 | AUG 31 | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 91 | JUN 09 | 3 | SEP 05 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

SHEEP RIVER AT OKOTOKS - STATION NO. 05BL012

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1978 | MAY-MAY | M-MS | 82 | MAY 14 * | 82 | MAY 14 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

SIFFLEUR RIVER NEAR THE MOUTH - STATION NO. 05DA002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 30 | 16:00 | 2.0 | 1.28 | 6 | WELB | | | | | | | | | | | | 255 | | | | DIP |
| MAY 31 | 16:15 | 5.0 | 17.7 | 23 | MID | | | | | | | | | | | | 143 | | | | DH59 |
| JUN 26 | 14:50 | 8.0 | 26.3 | 10 | WELB | | | | | | | | | | | | 114 | | | | DIP |
| JUL 31 | 15:30 | 11.0 | 23.9 | 13 | MID | | | | | | | | | | | | 107 | | | | DH59 |
| AUG 30 | 13:05 | 6.0 | 11.1 | 6 | MID | | | | | | | | | | | | 145 | | | | DH59 |
| SEP 25 | 18:00 | | 8.34 | 1 | --- | | | | | | | | | | | | 159 | | | | DH59 |
| SEP 25 | 18:01 | | 8.34 | 3 | --- | | | | | | | | | | | | 185 | | | | DH59 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

SIFFLEUR RIVER NEAR THE MOUTH - STATION NO. 05DA002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | | MINIMUM (mg/L) | | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | APR-OCT # | M-MS | 32 | JUL 10 | | 0 | AUG 27 | * | --- | --- | --- | --- | --- |
| 1976 | MAY-OCT # | M-MS | 17 | JUL 20 | | 1 | OCT 26 | | --- | --- | --- | --- | --- |
| 1977 | MAY-NOV # | M-MS | 11 | JUL 27 | | 0 | MAY 31 | | --- | --- | --- | --- | --- |
| 1978 | APR-SEP # | M-MS | 11 | JUN 23 | | 0 | APR 24 | | --- | --- | --- | --- | --- |
| 1979 | MAY-NOV # | M-MS | 29 | MAY 24 | | 0 | JUN 27 | | --- | --- | --- | --- | --- |
| 1980 | APR-SEP # | M-MS | 43 | JUN 24 | | 4 | APR 22 | | --- | --- | --- | --- | --- |
| 1981 | MAY-OCT # | M-MS | 84 | JUL 29 | * | 2 | OCT 20 | | --- | --- | --- | --- | --- |
| 1982 | APR-OCT # | M-MS | 11 | JUL 08 | | 2 | APR 28 | | --- | --- | --- | --- | --- |
| 1983 | MAY-OCT # | M-MS | 18 | JUN 02 | | 1 | SEP 19 | | --- | --- | --- | --- | --- |
| 1984 | APR-SEP | M-MS | 23 | MAY 31 | | 1 | SEP 26 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

SIMONETTE RIVER NEAR GODWIN - STATION NO. 07GF001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 09 | 17:15 | 3.5 | 24.0 | 190 | MID | | | | | | | | | | | | 193 | | | | DH59 |
| APR 17 | 14:00 | 7.0 | 45.2 | 738 | 91.0 | | | | | | | | | | | | 191 | | | | DH59 |
| JUN 11 | 15:05 | 18.5 | 112 | 706 | 91.0 | 25 | 33 | 47 | 64 | 69 | 78 | 91 | 100 | | | | 183 | 22 | 45 | 33 | DH59 |
| JUN 28 | 11:40 | 17.0 | 22.8 | 77 | 91.0 | | | | | | | | | | | | 218 | | | | DH59 |
| JUL 31 | 10:05 | 24.0 | 5.41 | 10 | MID | | | | | | | | | | | | 275 | | | | DH48 |
| AUG 28 | 10:10 | 13.0 | 5.80 | 9 | MID | | | | | | | | | | | | 265 | | | | DH48 |
| SEP 25 | 11:15 | 4.5 | 72.7 | 331 | 89.0 | | | | | | | | | | | | 187 | | | | DH59 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

ALBERTA

SIMONETTE RIVER NEAR GODDWIN - STATION NO. 07GF001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | | | MINIMUM (mg/L) | | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | SEP-NOV # | M-MS | 17 | NOV 07 | | 11 | SEP 19 | | | --- | --- | --- | --- | --- |
| 1975 | APR-OCT # | M-MS | 972 | APR 29 | | 4 | AUG 19 | | | --- | --- | --- | --- | --- |
| 1976 | APR-JUL # | M-MS | 4 300 | APR 08 | | 24 | JUL 28 | | | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 2 690 | APR 11 | | 19 | OCT 26 | | | --- | --- | --- | --- | --- |
| 1978 | MAY-OCT # | M-MS | 1 200 | MAY 02 | | 6 | AUG 30 | | | --- | --- | --- | --- | --- |
| 1979 | APR-OCT # | M-MS | 3 780 | JUN 16 | | 6 | OCT 30 | | | --- | --- | --- | --- | --- |
| 1980 | APR-SEP # | M-MS | 3 480 | JUN 07 | | 40 | JUL 24 | | | --- | --- | --- | --- | --- |
| 1981 | APR-OCT # | M-MS | 487 | APR 28 | | 3 | SEP 04 | * | | --- | --- | --- | --- | --- |
| 1982 | MAY-OCT # | M-MS | 2 880 | JUL 15 | | 42 | OCT 05 | | | --- | --- | --- | --- | --- |
| 1983 | APR-SEP # | M-MS | 7 230 | JUL 16 | * | 37 | AUG 30 | | | --- | --- | --- | --- | --- |
| 1984 | APR-SEP | M-MS | 738 | APR 17 | | 9 | AUG 28 | | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE  * - EXTREME FOR PERIOD OF RECORD

SLAVE RIVER AT FITZGERALD - STATION NO. 07NB001

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 59 52 20 N LONG 111 35 00 W
DRAINAGE AREA: 606 000 km²
TYPE OF FLOW: REGULATED SINCE 1958
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 20 287 700 TONNES FOR THE PERIOD MAY 01 TO OCT 31

REMARKS:

| DAY | MAY DAILY DISCHARGE (m³/s) | MAY MEAN CONCENTRATION (mg/L) | MAY DAILY LOAD (t) | JUN DAILY DISCHARGE (m³/s) | JUN MEAN CONCENTRATION (mg/L) | JUN DAILY LOAD (t) | JUL DAILY DISCHARGE (m³/s) | JUL MEAN CONCENTRATION (mg/L) | JUL DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 760 B | 400 | 130 000 | 5 300 | 2 370 S | 1 090 000 | 4 200 | 310 S | 112 000 | 1 |
| 2 | 3 610 B | 275 | 85 800 | 5 070 | 2 130 S | 933 000 | 3 970 | 325 S | 111 000 | 2 |
| 3 | 3 080 | 210 | 55 500 | 4 930 | 1 830 S | 779 000 | 4 230 | 334 S | 122 000 | 3 |
| 4 | 2 880 | 200 | 49 900 | 4 870 | 1 390 S | 585 000 | 4 420 | 333 S | 127 000 | 4 |
| 5 | 2 930 | 185 | 46 800 | 4 880 | 1 150 S | 485 000 | 4 840 | 300 S | 120 000 | 5 |
| 6 | 3 050 | 182 | 48 000 | 5 040 | 759 S | 331 000 | 4 920 | 307 S | 131 000 | 6 |
| 7 | 3 070 | 185 | 49 100 | 5 310 | 743 S | 341 000 | 5 140 | 303 | 135 000 | 7 |
| 8 | 3 130 | 175 S | 47 300 | 5 370 | 699 S | 324 000 | 5 050 | 304 S | 133 000 | 8 |
| 9 | 3 210 | 174 S | 48 300 | 5 250 | 622 S | 282 000 | 4 940 | 301 | 157 000 | 9 |
| 10 | 3 270 | 175 S | 49 400 | 5 040 | 606 S | 284 000 | 4 890 | 529 S | 224 000 | 10 |
| 11 | 3 310 | 182 S | 52 000 | 4 970 | 588 S | 252 000 | 4 850 | 589 S | 247 000 | 11 |
| 12 | 3 320 | 143 S | 41 000 | 5 070 | 586 S | 248 000 | 4 880 | 510 S | 214 000 | 12 |
| 13 | 3 380 | 126 S | 37 000 | 5 420 | 540 S | 253 000 | 4 990 | 470 S | 203 000 | 13 |
| 14 | 3 340 | 128 S | 38 900 | 5 930 | 616 S | 316 000 | 5 110 | 401 S | 177 000 | 14 |
| 15 | 3 340 | 126 S | 36 400 | 6 140 | 721 S | 382 000 | 5 100 | 345 S | 152 000 | 15 |
| 16 | 3 340 | 154 S | 44 400 | 6 180 | 808 S | 431 000 | 5 080 | 330 S | 144 000 | 16 |
| 17 | 3 400 | 156 S | 46 800 | 6 110 | 1 080 S | 578 000 | 5 120 | 338 S | 150 000 | 17 |
| 18 | 3 400 | 142 S | 41 700 | 5 980 | 1 640 S | 847 000 | 4 990 | 378 S | 183 000 | 18 |
| 19 | 3 310 | 121 S | 34 800 | 5 950 | 1 830 S | 938 000 | 5 130 | 498 | 221 000 | 19 |
| 20 | 3 240 | 108 S | 30 500 | 5 910 | 1 350 S | 689 000 | 5 140 | 557 S | 247 000 | 20 |
| 21 | 3 190 | 131 S | 36 100 | 5 880 | 1 180 S | 587 000 | 5 120 | 527 S | 233 000 | 21 |
| 22 | 3 310 | 159 S | 45 500 | 5 750 | 858 S | 426 000 | 4 850 | 418 S | 178 000 | 22 |
| 23 | 3 890 | 234 S | 78 600 | 5 600 | 721 S | 348 000 | 4 850 | 372 S | 156 000 | 23 |
| 24 | 4 880 | 489 S | 187 000 | 5 410 | 607 S | 284 000 | 4 810 | 306 S | 127 000 | 24 |
| 25 | 5 380 | 782 S | 362 000 | 5 190 | 508 S | 228 000 | 4 900 | 274 S | 118 000 | 25 |
| 26 | 5 540 | 883 S | 461 000 | 4 980 | 458 S | 198 000 | 4 980 | 234 S | 101 000 | 26 |
| 27 | 5 610 | 1 180 S | 582 000 | 4 880 | 393 S | 165 000 | 4 970 | 201 S | 86 300 | 27 |
| 28 | 5 850 | 1 980 S | 957 000 | 4 890 | 332 S | 135 000 | 4 840 | 184 S | 76 900 | 28 |
| 29 | 5 850 | 2 180 S | 1 050 000 | 4 550 | 314 S | 123 000 | 4 880 | 183 S | 85 900 | 29 |
| 30 | 5 550 | 3 070 S | 893 000 | 4 720 | 300 S | 122 000 | 4 590 | 152 S | 60 300 | 30 |
| 31 | 5 480 | 2 190 S | 1 030 000 | | | | 4 550 | 133 S | 52 300 | 31 |
| TOTAL | 118 400 | | 6 782 800 | 150 310 | | 12 810 000 | 148 990 | | 4 553 700 | TOTAL |

| DAY | AUG DAILY DISCHARGE (m³/s) | AUG MEAN CONCENTRATION (mg/L) | AUG DAILY LOAD (t) | SEP DAILY DISCHARGE (m³/s) | SEP MEAN CONCENTRATION (mg/L) | SEP DAILY LOAD (t) | OCT DAILY DISCHARGE (m³/s) | OCT MEAN CONCENTRATION (mg/L) | OCT DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 480 | 112 S | 43 400 | 3 720 | 195 S | 82 700 | 4 420 | 123 S | 47 000 | 1 |
| 2 | 4 440 | 108 S | 41 400 | 3 780 | 168 S | 81 800 | 4 280 | 119 S | 44 000 | 2 |
| 3 | 4 400 | 188 S | 63 900 | 3 800 | 122 S | 40 100 | 4 180 | 118 S | 42 800 | 3 |
| 4 | 4 380 | 342 S | 128 000 | 3 880 | 107 S | 34 000 | 4 120 | 109 S | 38 800 | 4 |
| 5 | 4 380 | 104 S | 39 200 | 3 890 | 105 S | 33 600 | 3 980 | 95 | 32 700 | 5 |
| 6 | 4 380 | 80 S | 30 300 | 3 770 | 107 S | 34 800 | 3 840 | 84 | 27 800 | 6 |
| 7 | 4 480 | 88 S | 34 500 | 4 050 | 133 S | 46 500 | 3 850 | 81 | 26 800 | 7 |
| 8 | 4 410 | 93 S | 35 400 | 4 050 | 146 S | 51 200 | 3 790 | 88 | 28 800 | 8 |
| 9 | 4 320 | 96 S | 35 800 | 3 820 | 125 S | 41 300 | 3 740 | 87 | 31 300 | 9 |
| 10 | 4 230 | 96 S | 35 100 | 3 680 | 126 S | 39 800 | 3 880 | 89 | 28 300 | 10 |
| 11 | 4 110 | 82 S | 28 100 | 3 530 | 103 S | 31 400 | 3 890 | 83 | 28 800 | 11 |
| 12 | 4 200 | 83 S | 30 100 | 3 420 | 99 S | 29 300 | 3 880 | 82 S | 26 800 | 12 |
| 13 | 4 300 | 107 S | 38 800 | 3 400 | 87 S | 25 800 | 3 850 | 70 | 22 100 | 13 |
| 14 | 4 350 | 124 S | 46 800 | 3 440 | 76 S | 22 800 | 3 840 | 55 | 18 800 | 14 |
| 15 | 4 280 | 133 S | 49 200 | 3 590 | 83 S | 25 700 | 3 440 | 54 | 18 000 | 15 |
| 16 | 4 210 | 314 S | 114 000 | 3 850 | 102 S | 33 800 | 3 480 | 88 | 26 800 | 16 |
| 17 | 4 130 | 375 S | 134 000 | 4 070 | 118 S | 40 800 | 4 050 | 161 S | 56 300 | 17 |
| 18 | 4 110 | 289 S | 103 000 | 4 230 | 131 S | 47 800 | 4 700 | 240 | 87 500 | 18 |
| 19 | 4 040 | 205 S | 71 800 | 4 380 | 183 S | 61 400 | 4 810 | 280 | 116 000 | 19 |
| 20 | 3 910 | 139 S | 47 000 | 4 390 | 136 S | 62 300 | 4 780 | 280 | 115 000 | 20 |
| 21 | 3 880 | 100 S | 33 500 | 4 410 | 141 S | 53 700 | 4 750 | 288 | 110 000 | 21 |
| 22 | 3 820 | 88 S | 29 000 | 4 400 | 148 S | 56 800 | 4 630 | 261 | 104 000 | 22 |
| 23 | 3 780 | 84 S | 27 400 | 4 280 | 163 S | 58 700 | 4 570 | 250 S | 98 700 | 23 |
| 24 | 3 730 | 75 S | 24 200 | 4 170 | 138 S | 49 700 | 4 540 | 238 | 93 400 | 24 |
| 25 | 3 690 | 74 S | 23 800 | 4 180 | 116 S | 41 800 | 4 500 | 217 | 84 400 | 25 |
| 26 | 3 640 | 80 S | 25 200 | 4 280 | 130 S | 48 100 | 4 490 | 195 | 75 800 | 26 |
| 27 | 3 580 | 87 S | 26 900 | 4 310 | 140 S | 52 100 | 4 300 B | 175 | 65 000 | 27 |
| 28 | 3 600 | 136 S | 42 800 | 4 280 | 135 S | 50 000 | 4 050 B | 100 | 35 000 | 28 |
| 29 | 3 430 | 148 S | 43 900 | 4 340 | 118 S | 43 500 | 3 730 B | 75 | 24 300 | 29 |
| 30 | 3 570 | 156 S | 48 100 | 4 370 | 120 S | 45 300 | 3 390 B | 80 | 14 900 | 30 |
| 31 | 3 880 | 158 S | 53 100 | | | | 2 840 B | 80 | 12 700 | 31 |
| TOTAL | 125 910 | | 1 830 200 | 119 350 | | 1 303 800 | 125 870 | | 1 884 800 | TOTAL |

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

SLAVE RIVER AT FITZGERALD - STATION NO. 07NB001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 08 | 09:00 | | 3090 | 185 | WELB | | | | | | | | | | | | 143 | | | | PUMP |
| MAY 08 | 13:00 | | 3190 | 174 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 10 | 13:15 | | 3250 | 188 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 11 | 16:14 | | 3340 | 184 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 12 | 13:00 | 7.0 | 3310 | 147 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 13 | 13:00 | 7.0 | 3240 | 131 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 14 | 14:45 | | 3370 | 124 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 15 | 14:30 | | 3340 | 118 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 16 | 15:00 | | 3340 | 156 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 17 | 14:00 | | 3370 | 151 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 18 | 15:00 | 8.0 | 3420 | 144 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 19 | 15:00 | 8.0 | 4180 | 124 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 20 | 13:30 | 8.0 | 3260 | 109 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 21 | 13:30 | 8.0 | 3210 | 132 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 22 | 15:20 | 8.0 | 3250 | 161 | WELB | | | | | | | | | | | | 145 | | | | PUMP |
| MAY 23 | 16:00 | 8.0 | 3300 | 210 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 24 | 14:00 | 8.0 | 4880 | 405 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 25 | 16:00 | 8.0 | 5370 | 785 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 26 | 17:00 | 8.0 | 5540 | 880 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 27 | 13:00 | 8.0 | 5590 | 894 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 28 | 15:30 | | 5840 | 1970 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 29 | 15:20 | | 5840 | 2190 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 30 | 16:00 | 9.0 | 5540 | 2050 | WELB | | | | | | | | | | | | | | | | PUMP |
| MAY 31 | 16:30 | | 5470 | 2150 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 01 | 16:00 | | 5330 | 2420 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 02 | 15:00 | 10.0 | 5100 | 2170 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 03 | 15:00 | 11.0 | 4960 | 1930 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 04 | 15:45 | | 4870 | 1400 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 05 | 15:15 | | 4850 | 1230 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 06 | 16:40 | | 5000 | 733 | WELB | | | | | | | | | | | | 194 | | | | PUMP |
| JUN 07 | 15:00 | | 5280 | 745 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 08 | 16:30 | | 5350 | 701 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 09 | 16:00 | | 5270 | 624 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 10 | 14:00 | | 5100 | 612 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 11 | 16:00 | | 4940 | 591 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 12 | 14:00 | | 5010 | 574 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 13 | 18:00 | | 5280 | 531 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 14 | 15:30 | | 5880 | 619 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 15 | 19:00 | | 6160 | 725 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 16 | 10:00 | | 6180 | 784 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 17 | 13:00 | | 6140 | 950 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 18 | 15:00 | 15.0 | 5870 | 1640 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 19 | 18:00 | | 5850 | 1640 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 20 | 10:10 | | 5900 | 1380 | WELB | | | | | | | | | | | | 204 | | | | PUMP |
| JUN 20 | 10:15 | | 5900 | 1420 | WELB | | | | | | | | | | | | 197 | | | | D49 |
| JUN 20 | 10:20 | | 5900 | 1450 | WELB | | | | | | | | | | | | 204 | | | | D49 |
| JUN 20 | 13:00 | | 5930 | 1410 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 21 | 18:00 | | 5860 | 1170 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 22 | 14:30 | | 5770 | 1000 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 23 | 11:00 | 12.0 | 5840 | 788 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 24 | 15:35 | 16.0 | 5450 | 819 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 25 | 18:00 | 17.0 | 5210 | 494 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 26 | 14:30 | | 4980 | 488 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 27 | 16:00 | 17.0 | 4880 | 399 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 28 | 16:30 | | 4690 | 327 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 29 | 10:00 | | 4590 | 320 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUN 30 | 14:30 | | 4590 | 305 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 01 | 14:00 | 17.0 | 4380 | 301 | WELB | | | | | | | | | | | | 181 | | | | PUMP |
| JUL 02 | 13:00 | 15.0 | 3470 | 319 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 03 | 15:30 | | 4220 | 330 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 04 | 13:30 | | 4380 | 355 | WELB | | | | | | | | | | | | 158 | | | | PUMP |
| JUL 04 | 13:31 | | 4380 | 337 | WELB | | | | | | | | | | | | 162 | | | | PUMP |
| JUL 04 | 14:40 | | 4390 | 343 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 05 | 09:00 | 14.0 | 4540 | 300 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 05 | 12:00 | 16.0 | 4570 | 318 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 06 | 17:00 | | 4820 | 317 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 08 | 15:00 | 17.0 | 5080 | 297 | WELB | | | | | | | | | | | | 174 | | | | PUMP |
| JUL 10 | 14:40 | | 4890 | 513 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 11 | 16:00 | | 4850 | 613 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 12 | 19:00 | | 4880 | 493 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 13 | 17:00 | 16.0 | 4980 | 483 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 14 | 13:00 | 16.0 | 5090 | 410 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 15 | 13:00 | | 5120 | 359 | WELB | | | | | | | | | | | | 181 | | | | PUMP |
| JUL 16 | 15:50 | | 5040 | 323 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 17 | 18:00 | 14.0 | 5160 | 340 | WELB | | | | | | | | | | | | 170 | | | | PUMP |
| JUL 18 | 09:15 | | 4950 | 339 | WELB | | | | | | | | | | | | 186 | | | | PUMP |
| JUL 18 | 10:25 | | 4940 | 337 | WELB | | | | | | | | | | | | 182 | | | | PUMP |
| JUL 18 | 10:30 | | 4940 | 364 | WELB | | | | | | | | | | | | 180 | | | | PUMP |
| JUL 18 | 10:44 | | 4950 | 362 | WELB | | | | | | | | | | | | 182 | | | | DIP |
| JUL 18 | 11:10 | | 4960 | 377 | WELB | | | | | | | | | | | | 175 | | | | D49 |
| JUL 18 | 11:15 | | 4940 | 390 | WELB | | | | | | | | | | | | 159 | | | | D49 |
| JUL 18 | 13:00 | 15.0 | 4950 | 385 | WELB | | | | | | | | | | | | 157 | | | | PUMP |
| JUL 18 | 14:40 | 15.0 | 805 | 294 | 188 M | | | | | | | | | | | | 154 | | | | P61 |
| JUL 18 | 14:41 | 15.0 | 805 | 251 | 188 | | | | | | | | | | | | 152 | | | | DIP |
| JUL 18 | 14:50 | 15.0 | 974 | 333 | 228 M | | | | | | | | | | | | 140 | | | | P61 |
| JUL 18 | 14:51 | 15.0 | 974 | 245 | 228 | | | | | | | | | | | | 165 | | | | DIP |
| JUL 18 | 15:00 | 15.0 | 1110 | 273 | 260 M | | | | | | | | | | | | 165 | | | | P61 |
| JUL 18 | 15:01 | 15.0 | 1110 | 258 | 260 | | | | | | | | | | | | 165 | | | | DIP |
| JUL 18 | 15:10 | 15.0 | 991 | 398 | 381 M | | | | | | | | | | | | 157 | | | | P61 |
| JUL 18 | 15:11 | 15.0 | 991 | 278 | 381 | | | | | | | | | | | | 153 | | | | DIP |
| JUL 18 | 15:20 | 15.0 | 659 | 328 | 534 M | | | | | | | | | | | | 154 | | | | P61 |
| JUL 18 | 15:21 | 15.0 | 659 | 288 | 534 | | | | | | | | | | | | 155 | | | | DIP |
| JUL 20 | 10:15 | | 5120 | 551 | WELB | | | | | | | | | | | | 158 | | | | PUMP |
| JUL 21 | 10:00 | 15.0 | 5150 | 563 | WELB | | | | | | | | | | | | 163 | | | | PUMP |
| JUL 22 | 09:00 | | 5020 | 457 | WELB | | | | | | | | | | | | 157 | | | | PUMP |
| JUL 23 | 13:00 | | 4850 | 398 | WELB | | | | | | | | | | | | 158 | | | | PUMP |
| JUL 24 | 18:00 | 20.0 | 4810 | 296 | WELB | | | | | | | | | | | | 153 | | | | PUMP |
| JUL 25 | 18:00 | 20.0 | 4910 | 277 | WELB | | | | | | | | | | | | 142 | | | | PUMP |
| JUL 26 | 18:00 | 20.0 | 4990 | 233 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 27 | 18:00 | 20.0 | 4990 | 195 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 28 | 14:00 | 20.0 | 4870 | 188 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 29 | 13:00 | | 4880 | 160 | WELB | | | | | | | | | | | | | | | | PUMP |
| JUL 30 | 13:10 | | 4590 | 182 | WELB | | | | | | | | | | | | 149 | | | | PUMP |

NOTE : SINGLE VERTICAL LOCATED AT WELB

VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

CONTINUED

SLAVE RIVER AT FITZGERALD - STATION NO. 07NB001 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JUL 31 | 18:00 | 20.0 | 4550 | 128 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 01 | 15:00 | 20.0 | 4490 | 110 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 02 | 17:00 | 20.0 | 4430 | 113 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 03 | 10:00 | 20.0 | 4410 | 105 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 04 | 17:00 | 20.0 | 4370 | 392 C | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 05 | 17:00 | 20.0 | 4350 | 87 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 06 | 17:00 | 20.0 | 4270 | 88 | WELB | | | | | | | | | | | | 137 | | | | PUMP |
| AUG 07 | 10:50 | | 4480 | 88 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 07 | 10:51 | | 4480 | 91 | WELB | | | | | | | | | | | | 142 | | | | PUMP |
| AUG 07 | 17:30 | 20.0 | 4500 | 80 | WELB | | | | | | | | | | | | 138 | | | | PUMP |
| AUG 08 | 13:00 | 19.0 | 4460 | 92 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 09 | 10:00 | 20.0 | 4330 | 90 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 10 | 13:00 | 20.0 | 4280 | 99 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 11 | 14:00 | 19.0 | 4110 | 83 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 12 | 14:00 | 20.0 | 4140 | 78 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 13 | 17:00 | 20.0 | 4280 | 99 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 14 | 12:30 | 18.0 | 4370 | 137 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 15 | 17:00 | 20.0 | 4290 | 115 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 16 | 14:40 | 19.0 | 4230 | 278 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 17 | 13:30 | 19.0 | 4130 | 397 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 18 | 09:30 | 18.0 | 4110 | 323 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 19 | 16:00 | 17.0 | 4060 | 208 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 20 | 19:00 | 17.0 | 3910 | 136 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 21 | 19:00 | 17.0 | 3900 | 89 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 22 | 08:55 | 17.0 | 3880 | 91 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 22 | 08:56 | 17.0 | 3880 | 86 | WELB | | | | | | | | | | | | 145 | | | | PUMP |
| AUG 22 | 09:00 | 20.0 | 3880 | 89 | WELB | | | | | | | | | | | | 148 | | | | PUMP |
| AUG 23 | 18:30 | 20.0 | 3790 | 84 | WELB | | | | | | | | | | | | 137 | | | | DIP |
| AUG 24 | 19:00 | 18.0 | 3730 | 78 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 25 | 18:00 | 20.0 | 3700 | 73 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 26 | 15:00 | 18.0 | 3680 | 81 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 27 | 08:30 | 18.0 | 3660 | 80 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 28 | 14:30 | 18.0 | 3610 | 116 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 29 | 13:00 | 15.0 | 3390 | 154 | WELB | | | | | | | | | | | | 148 | | | | PUMP |
| AUG 30 | 17:00 | 14.0 | 3650 | 157 | WELB | | | | | | | | | | | | | | | | PUMP |
| AUG 31 | 15:00 | 16.0 | 3640 | 162 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 01 | 13:00 | 12.0 | 3700 | 197 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 02 | 15:30 | 18.0 | 3750 | 186 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 03 | 12:30 | 18.0 | 3750 | 131 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 04 | 16:00 | 18.0 | 3880 | 107 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 05 | 15:00 | 13.0 | 3880 | 105 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 06 | 10:00 | 12.0 | 3740 | 106 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 07 | 15:00 | 14.0 | 4020 | 126 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 08 | 15:30 | 14.0 | 4100 | 153 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 09 | 14:00 | 16.0 | 3880 | 120 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 10 | 14:00 | 16.0 | 3880 | 133 | WELB | | | | | | | | | | | | | | | | PUMP |
| SEP 11 | 13:50 | | 3880 | 131 | WELB | | | | | | | | | | | | 142 | | | | PUMP |
| SEP 11 | 13:51 | | 3880 | 106 | WELB | | | | | | | | | | | | 134 | | | | PUMP |
| SEP 12 | 09:00 | 8.0 | 3480 | 100 | WELB | | | | | | | | | | | | 134 | | | | PUMP |
| SEP 13 | 13:00 | 8.0 | 3400 | 93 | WELB | | | | | | | | | | | | 147 | | | | PUMP |
| SEP 14 | 12:00 | | 3420 | 88 | WELB | | | | | | | | | | | | 145 | | | | PUMP |
| SEP 14 | 12:01 | | 3420 | 80 | WELB | | | | | | | | | | | | 138 | | | | PUMP |
| SEP 14 | 12:05 | | 3420 | 83 | WELB | | | | | | | | | | | | 139 | | | | PUMP |
| SEP 14 | 12:20 | | 3420 | 88 | WELB | | | | | | | | | | | | 137 | | | | DIP |
| SEP 14 | 12:25 | | 3420 | 84 | WELB | | | | | | | | | | | | 140 | | | | D&S |
| SEP 14 | 12:35 | | 3420 | 73 | WELB | | | | | | | | | | | | 132 | | | | D&S |
| SEP 14 | 12:36 | | 3420 | 79 | WELB | | | | | | | | | | | | 138 | | | | PUMP |
| SEP 15 | 13:00 | 8.0 | 3520 | 78 | WELB | | | | | | | | | | | | 150 | | | | PUMP |
| SEP 16 | 10:00 | 8.0 | 3610 | 95 | WELB | | | | | | | | | | | | 137 | | | | PUMP |
| SEP 17 | 12:00 | 8.0 | 4010 | 116 | WELB | | | | | | | | | | | | 136 | | | | PUMP |
| SEP 18 | 15:00 | 8.0 | 4200 | 120 | WELB | | | | | | | | | | | | 135 | | | | PUMP |
| SEP 19 | 15:00 | 8.0 | 4350 | 169 | WELB | | | | | | | | | | | | 148 | | | | PUMP |
| SEP 20 | 12:00 | 3.0 | 4400 | 140 | WELB | | | | | | | | | | | | 145 | | | | PUMP |
| SEP 21 | 15:00 | 4.0 | 4400 | 139 | WELB | | | | | | | | | | | | 139 | | | | PUMP |
| SEP 22 | 09:00 | 2.0 | 4430 | 148 | WELB | | | | | | | | | | | | 138 | | | | PUMP |
| SEP 23 | 17:00 | 2.0 | 4300 | 155 | WELB | | | | | | | | | | | | 136 | | | | PUMP |
| SEP 24 | 15:00 | 11.0 | 4160 | 145 | WELB | | | | | | | | | | | | 134 | | | | PUMP |
| SEP 25 | 14:30 | 10.0 | 4190 | 111 | WELB | | | | | | | | | | | | 129 | | | | PUMP |
| SEP 26 | 10:00 | 10.0 | 4250 | 123 | WELB | | | | | | | | | | | | 135 | | | | PUMP |
| SEP 27 | 12:00 | 10.0 | 4320 | 137 | WELB | | | | | | | | | | | | 148 | | | | PUMP |
| SEP 28 | 15:00 | 9.0 | 4280 | 139 | WELB | | | | | | | | | | | | 138 | | | | PUMP |
| SEP 29 | 13:00 | 10.0 | 4320 | 117 | WELB | | | | | | | | | | | | 138 | | | | PUMP |
| SEP 30 | 10:00 | 9.0 | 4380 | 117 | WELB | | | | | | | | | | | | 130 | | | | PUMP |
| OCT 01 | 15:00 | 9.0 | 4400 | 125 | WELB | | | | | | | | | | | | 130 | | | | PUMP |
| OCT 02 | 02:15 | | 4310 | 101 | WELB | | | | | | | | | | | | 134 | | | | PUMP |
| OCT 02 | 02:20 | | 4320 | 108 | WELB | | | | | | | | | | | | 150 | | | | PUMP |
| OCT 02 | 04:30 | | 4380 | 138 | WELB | | | | | | | | | | | | 155 | | | | DIP |
| OCT 02 | 04:35 | | 4380 | 156 | WELB | | | | | | | | | | | | 137 | | | | D&S |
| OCT 02 | 04:45 | | 4380 | 133 | WELB | | | | | | | | | | | | 129 | | | | D&S |
| OCT 02 | 14:44 | | 918 | 103 | 188 | | | | | | | | | | | | 131 | | | | PUMP |
| OCT 02 | 14:45 | | 918 | 93 | 188 M | | | | | | | | | | | | 128 | | | | DIP |
| OCT 02 | 14:58 | | 901 | 80 | 259 | | | | | | | | | | | | 131 | | | | D&S |
| OCT 02 | 15:00 | | 901 | 120 | 259 M | | | | | | | | | | | | 147 | | | | DIP |
| OCT 02 | 15:10 | | 811 | 88 | 290 | | | | | | | | | | | | 148 | | | | D&S |
| OCT 02 | 15:15 | | 811 | 125 | 290 M | | | | | | | | | | | | 136 | | | | DIP |
| OCT 02 | 15:20 | | 787 | 78 | 381 | | | | | | | | | | | | 133 | | | | D&S |
| OCT 02 | 15:25 | | 787 | 126 | 381 M | | | | | | | | | | | | 137 | | | | DIP |
| OCT 02 | 15:30 | | 815 | 108 | 534 | | | | | | | | | | | | 133 | | | | D&S |
| OCT 02 | 15:35 | | 815 | 131 | 534 M | | | | | | | | | | | | 136 | | | | DIP |
| OCT 03 | 13:00 | 5.0 | 4180 | 119 | WELB | | | | | | | | | | | | 138 | | | | D&S |
| OCT 04 | 15:00 | 5.0 | 4130 | 112 | WELB | | | | | | | | | | | | | | | | PUMP |
| OCT 12 | 10:40 | | 3870 | 103 | WELB | | | | | | | | | | | | | | | | PUMP |
| OCT 12 | 10:41 | | 3870 | 62 | WELB | | | | | | | | | | | | 132 | | | | PUMP |
| OCT 17 | 12:45 | | 3810 | 137 | WELB | | | | | | | | | | | | 126 | | | | PUMP |
| OCT 23 | 08:30 | 4.0 | 4590 | 263 | WELB | | | | | | | | | | | | 133 | | | | PUMP |
| | | | | | | | | | | | | | | | | | 128 | | | | PUMP |

NOTE : SINGLE VERTICAL LOCATED AT WELB

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

ALBERTA

SLAVE RIVER AT FITZGERALD - STATION NO. 07NB001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : JUN-SEP MEAN LOAD (TONNES) | SUMMARY : JUN-SEP HISTORICAL MEAN LOAD (TONNES) | SUMMARY : JUN-SEP STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1971 | AUG-OCT | M-S | 359 | AUG 04 | 106 | OCT 21 | 182 000 | AUG 01 | 5 260 000 | | --- | --- | --- |
| 1972 | JUN-SEP | M-S | 7 810 | JUN 22 * | 131 | SEP 15 | 4 640 000 | JUN 22 * | 44 500 000 | * | 385 000 | 385 000 | --- |
| 1973 | MAY-OCT | M-S | 1 010 | JUN 24 | 55 | OCT 03 | 558 000 | JUN 24 | 20 700 000 | | 152 000 | 259 000 | 0.0 |
| 1974 | JUN-OCT | M-S | 881 | JUL 29 | 85 | SEP 25 | 544 000 | JUL 25 | 21 300 000 | | 160 000 | 228 000 | 5.7 |
| 1975 | MAY-OCT | M-S | 558 | MAY 15 | 86 | OCT 22 | 238 000 | MAY 15 | 12 300 000 | | 72 700 | 187 000 | 0.0 |
| 1976 | MAY-SEP # | M-S | 3 080 | JUL 08 | 54 | AUG 05 | 1 640 000 | JUL 08 | 25 300 000 | | --- | --- | --- |
| 1977 | MAY-OCT | M-S | 720 | MAY 20 | 26 | SEP 27 * | 384 000 | MAY 15 | 14 800 000 | | 88 500 | 184 000 | 5.7 |
| 1978 | MAY-SEP | M-S | 1 540 | JUN 15 | 53 | AUG 28 | 767 000 | JUN 15 | 18 900 000 | | 122 000 | 157 000 | 5.5 |
| 1979 | MAY-OCT | B-S | 1 210 | JUN 09 | 45 | OCT 23 | 691 000 | JUN 09 | 23 100 000 | | 174 000 | 189 000 | 5.6 |
| 1980 | MAY-OCT | A-S | 2 030 | JUN 17 | 48 | SEP 04 | 752 000 | JUN 17 | 12 300 000 | | 83 400 | 150 000 | 8.2 |
| 1981 | MAY-OCT | A-S | 600 | JUN 10 | 28 | AUG 27 | 287 000 | JUN 10 | 7 480 000 | | 48 300 | 139 000 | 0.0 |
| 1982 | JUN-OCT | A-S | 5 270 | JUL 25 | 46 | OCT 08 | 2 550 000 | JUL 25 | 24 900 000 | | 195 000 | 144 000 | 0.0 |
| 1983 | MAY-OCT | B-S | 1 580 | JUL 03 | 52 | SEP 14 | 788 000 | JUL 26 | 26 200 000 | | 187 000 | 148 000 | 0.0 |
| 1984 | MAY-OCT | B-S | 2 420 | JUN 01 | 80 | SEP 14 | 1 090 000 | JUN 01 | 28 700 000 | | 186 000 | 150 000 | 0.0 |

A - AUTOMATIC SAMPLING B - BOTH AUTOMATIC AND MANUAL SAMPLING M - MANUAL SAMPLING

S - SEASONAL OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

SMOKY RIVER ABOVE HELLS CREEK - STATION NO. 07GA001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAY-SEP MEAN LOAD (TONNES) | SUMMARY : MAY-SEP HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAY-SEP STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | JUL-NOV # | M-MS | 210 | SEP 02 | 10 | NOV 14 | --- | | --- | | --- | --- | --- |
| 1968 | JUN-AUG | M-S | 7 540 | AUG 05 * | 16 | JUL 18 | 285 000 | AUG 05 * | 727 000 | * | --- | --- | --- |
| 1970 | MAR-SEP | M-S | 1 070 | JUN 04 | 2 | SEP 21 * | 48 700 | JUN 04 | 318 000 | | 2 050 | 2 050 | --- |
| 1971 | APR-SEP | M-S | 2 320 | JUN 09 | 12 | SEP 21 | 103 000 | JUN 09 | 852 000 | | 4 250 | 3 150 | 34.9 |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 58 000 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: MANUAL

TOTAL SUSPENDED SEDIMENT LOAD 117 056.88 TONNES FOR THE PERIOD APR 01 TO OCT 21

REMARKS:

| DAY | APR DAILY DISCHARGE (m³/s) | APR MEAN CONCENTRATION (mg/L) | APR DAILY LOAD (t) | MAY DAILY DISCHARGE (m³/s) | MAY MEAN CONCENTRATION (mg/L) | MAY DAILY LOAD (t) | JUN DAILY DISCHARGE (m³/s) | JUN MEAN CONCENTRATION (mg/L) | JUN DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 83.4 E | 31 S | 223 | 82.8 | 7 S | 38.0 | 57.7 | 30 S | 150 | 1 |
| 2 | 88.4 E | 33 | 255 | 58.5 | 8 | 29.3 | 55.4 | 21 S | 101 | 2 |
| 3 | 87.3 A | 33 S | 248 | 48.0 | 6 S | 24.8 | 53.8 | 16 S | 83.7 | 3 |
| 4 | 82.2 | 28 | 208 | 38.1 | 8 | 18.7 | 58.8 | 32 S | 133 | 4 |
| 5 | 80.5 | 24 S | 167 | 30.2 | 8 S | 15.7 | 124 | 57 S | 611 | 5 |
| 6 | 75.2 | 21 | 138 | 27.0 | 12 S | 28.0 | 114 | 83 S | 821 | 6 |
| 7 | 69.9 | 19 S | 115 | 24.3 | 12 | 25.2 | 102 | 57 S | 502 | 7 |
| 8 | 62.8 | 19 S | 103 | 23.0 | 12 | 23.8 | 89.8 | 78 S | 804 | 8 |
| 9 | 77.4 | 24 | 160 | 20.4 | 11 | 18.4 | 88.9 | 59 S | 453 | 9 |
| 10 | 75.7 | 23 S | 150 | 22.0 | 9 S | 17.1 | 84.5 | 51 S | 372 | 10 |
| 11 | 68.3 | 18 | 106 | 19.4 | 8 | 13.4 | 86.2 | 45 S | 335 | 11 |
| 12 | 65.5 | 17 S | 87.7 | 20.0 | 8 S | 13.8 | 89.5 | 59 S | 507 | 12 |
| 13 | 68.4 | 17 | 100 | 14.0 | 6 S | 7.28 | 148 | 117 S | 1 500 | 13 |
| 14 | 69.1 | 17 S | 101 | 13.0 | 5 | 5.82 | 197 | 184 S | 3 200 | 14 |
| 15 | 69.0 | 18 S | 107 | 26.2 | 25 S | 85.8 | 191 | 116 S | 1 950 | 15 |
| 16 | 68.2 | 16 | 94.3 | 24.2 | 87 S | 182 | 178 | 134 | 2 040 | 16 |
| 17 | 62.0 | 14 S | 75.0 | 28.1 | 89 S | 173 | 184 | 183 S | 2 880 | 17 |
| 18 | 55.7 | 11 | 52.8 | 24.0 | 37 S | 76.7 | 175 | 184 S | 2 480 | 18 |
| 19 | 63.1 | 11 S | 60.0 | 18.3 | 19 S | 30.0 | 220 | 183 S | 3 870 | 19 |
| 20 | 76.5 | 17 | 115 | 18.8 | 17 S | 27.8 | 247 | 189 S | 4 250 | 20 |
| 21 | 75.8 | 12 S | 78.7 | 20.1 | 30 S | 52.1 | 251 | 185 S | 4 230 | 21 |
| 22 | 83.5 | 12 S | 85.8 | 76.3 | 81 S | 548 | 250 | 304 S | 6 570 | 22 |
| 23 | 88.5 | 10 | 91.4 | 74.5 | 52 S | 335 | 283 | 385 S | 8 290 | 23 |
| 24 | 80.2 | 8 S | 46.8 | 67.2 | 38 S | 221 | 251 | 403 S | 8 740 | 24 |
| 25 | 88.4 | 15 | 94.8 | 74.7 | 24 S | 155 | 231 | 378 S | 7 540 | 25 |
| 26 | 74.2 | 20 S | 128 | 88.4 | 30 S | 224 | 220 | 479 S | 9 100 | 26 |
| 27 | 61.7 | 16 | 113 | 78.9 | 25 S | 168 | 198 | 315 | 5 330 | 27 |
| 28 | 70.6 | 13 S | 89.4 | 69.5 | 23 S | 138 | 180 | 182 S | 2 840 | 28 |
| 29 | 72.8 | 10 S | 82.9 | 69.9 | 22 S | 133 | 200 | 215 S | 3 720 | 29 |
| 30 | 65.2 | 8 | 45.1 | 88.4 | 23 S | 136 | 190 | 181 S | 2 840 | 30 |
| 31 | | | | 82.4 | 33 S | 176 | | | | 31 |
| TOTAL | 2 183.8 | | 3 448.8 | 1 305.8 | | 3 112.18 | 4 785.5 | | 84 972.7 | TOTAL |

| DAY | JUL DAILY DISCHARGE (m³/s) | JUL MEAN CONCENTRATION (mg/L) | JUL DAILY LOAD (t) | AUG DAILY DISCHARGE (m³/s) | AUG MEAN CONCENTRATION (mg/L) | AUG DAILY LOAD (t) | SEP DAILY DISCHARGE (m³/s) | SEP MEAN CONCENTRATION (mg/L) | SEP DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 204 | 135 S | 2 380 | 43.2 | 8 | 23.4 | 26.0 E | 11 | 24.7 | 1 |
| 2 | 202 | 132 | 2 300 | 46.1 | 8 | 31.8 | 26.0 E | 11 | 33.8 | 2 |
| 3 | 203 | 118 | 2 070 | 52.7 | 11 | 50.1 | 26.0 E | 11 | 33.8 | 3 |
| 4 | 236 | 124 S | 2 630 | 58.8 | 17 | 83.4 | 26.0 E | 11 | 33.8 | 4 |
| 5 | 239 | 132 | 2 730 | 71.3 | 34 | 209 | 24.3 A | 11 | 23.1 | 5 |
| 6 | 224 | 118 | 2 280 | 79.1 | 43 S | 294 | 26.3 | 15 | 32.8 | 6 |
| 7 | 230 | 116 S | 2 310 | 75.5 | 34 | 232 | 26.0 | 18 | 45.1 | 7 |
| 8 | 187 | 94 S | 1 520 | 62.1 | 23 | 123 | 33.2 | 19 | 54.5 | 8 |
| 9 | 148 | 66 | 844 | 59.1 | 20 | 102 | 37.7 | 18 S | 58.6 | 9 |
| 10 | 109 | 36 S | 339 | 62.2 | 24 | 129 | 36.4 | 13 | 40.9 | 10 |
| 11 | 83.2 | 22 S | 158 | 58.7 | 23 | 119 | 37.8 | 12 S | 39.3 | 11 |
| 12 | 77.2 | 20 | 133 | 60.6 | 20 | 87.4 | 43.3 | 16 | 59.9 | 12 |
| 13 | 83.2 | 28 | 208 | 47.4 | 15 S | 85.5 | 50.8 | 15 | 65.0 | 13 |
| 14 | 81.0 A | 21 S | 147 | 48.3 | 15 | 83.9 | 52.1 | 17 | 78.5 | 14 |
| 15 | 78.4 E | 15 S | 99.0 | 44.6 | 15 | 57.8 | 50.8 | 15 | 65.0 | 15 |
| 16 | 71.7 E | 14 | 86.7 | 43.3 | 14 | 52.6 | 46.2 | 13 S | 45.2 | 16 |
| 17 | 67.1 E | 13 | 89.6 | 40.3 | 14 | 48.7 | 21.6 | 13 | 35.5 | 17 |
| 18 | 63.4 E | 10 S | 83.8 | 37.8 | 13 S | 42.2 | 26.4 | 12 | 27.4 | 18 |
| 19 | 67.8 E | 10 | 68.8 | 36.7 | 14 | 44.4 | 23.8 | 12 | 24.4 | 19 |
| 20 | 63.1 E | 10 | 65.9 | 34.8 | 14 | 41.8 | 36.0 | 19 | 57.6 | 20 |
| 21 | 48.5 E | 10 S | 41.8 | 34.8 | 14 | 42.1 | 33.4 | 16 | 46.2 | 21 |
| 22 | 38.2 E | 8 S | 30.5 | 34.9 | 17 | 51.3 | 29.3 | 17 | 43.0 | 22 |
| 23 | 38.3 E | 8 | 28.5 | 34.8 | 18 | 54.1 | 30.8 | 21 | 55.9 | 23 |
| 24 | 34.8 A | 8 S | 14.8 | 34.0 | 18 | 47.0 | 29.4 | 24 | 61.0 | 24 |
| 25 | 34.3 | 8 S | 17.8 | 31.9 | 13 | 35.8 | 24.9 | 28 S | 55.8 | 25 |
| 26 | 34.8 | 8 | 17.8 | 29.8 | 11 S | 28.1 | 24.9 | 28 | 53.8 | 26 |
| 27 | 35.1 | 8 | 18.2 | 26.0 | 11 | 25.6 | 27.5 | 25 | 59.4 | 27 |
| 28 | 36.7 | 8 | 19.0 | 26.8 | 12 | 27.8 | 28.4 | 25 | 57.0 | 28 |
| 29 | 36.3 | 8 S | 18.8 | 26.8 | 14 | 34.8 | 27.2 | 28 | 80.0 | 29 |
| 30 | 40.8 | 7 | 24.7 | 26.7 A | 11 | 27.3 | 48.8 | 19 S | 78.3 | 30 |
| 31 | 42.1 | 8 | 21.8 | 27.0 E | 10 S | 23.3 | | | | 31 |
| TOTAL | 5 115.4 | | 20 878.0 | 1 381.5 | | 2 288.2 | 888.4 | | 1 447.7 | TOTAL |

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

SUSPENDED SEDIMENT FOR 1984

OCT

| DAY | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 45.2 | 17 | 66.6 | | | | | | | 1 |
| 2 | 39.1 | 16 S | 60.8 | | | | | | | 2 |
| 3 | 35.2 | 17 | 51.7 | | | | | | | 3 |
| 4 | 35.2 | 17 | 51.7 | | | | | | | 4 |
| 5 | 32.9 | 15 | 42.6 | | | | | | | 5 |
| 6 | 29.5 | 14 | 35.7 | | | | | | | 6 |
| 7 | 28.6 | 13 S | 33.6 | | | | | | | 7 |
| 8 | 33.7 | 17 | 49.5 | | | | | | | 8 |
| 9 | 34.6 | 16 | 47.6 | | | | | | | 9 |
| 10 | 32.9 | 15 | 42.6 | | | | | | | 10 |
| 11 | 31.0 | 15 | 40.2 | | | | | | | 11 |
| 12 | 31.8 | 19 | 52.4 | | | | | | | 12 |
| 13 | 34.2 | 21 S | 62.1 | | | | | | | 13 |
| 14 | 34.2 | 19 | 56.1 | | | | | | | 14 |
| 15 | 33.9 | 19 | 55.7 | | | | | | | 15 |
| 16 | 33.4 | 19 | 54.8 | | | | | | | 16 |
| 17 | 33.3 | 19 | 54.7 | | | | | | | 17 |
| 18 | 36.1 | 23 | 69.8 | | | | | | | 18 |
| 19 | 36.9 | 28 | 89.3 | | | | | | | 19 |
| 20 | 37.4 | 30 | 96.9 | | | | | | | 20 |
| 21 | 36.3 | 31 S | 97.2 | | | | | | | 21 |
| 22 | 32.9 | | | | | | | | | 22 |
| 23 | 28.1 | | | | | | | | | 23 |
| 24 | 30.0 | | | | | | | | | 24 |
| 25 | 28.8 | | | | | | | | | 25 |
| 26 | 28.5 | | | | | | | | | 26 |
| 27 | 31.4 B | | | | | | | | | 27 |
| 28 | 35.3 B | | | | | | | | | 28 |
| 29 | 31.9 B | | | | | | | | | 29 |
| 30 | 22.5 B | | | | | | | | | 30 |
| 31 | 15.6 B | | | | | | | | | 31 |
| TOTAL | 1 011.7 | | 1 211.5 | | | | | | | TOTAL |

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 01 | 10:15 | 5.0 | 83.4 | Y 31 | MID | | | | | | | | | | | | 245 | | | | DH59 |
| APR 03 | 09:30 | 7.0 | 87.3 | Y 34 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 05 | 13:00 | 8.0 | 81.0 | 33 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 07 | 07:00 | 6.0 | 70.4 | 19 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 08 | 15:00 | 9.0 | 86.7 | 18 | MID | | | | | | | | | | | | 262 | | | | DH59 |
| APR 10 | 12:00E | 10.0 | 75.7 | H 33 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 12 | 07:00 | 7.0 | 85.7 | 17 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 14 | 07:45 | 8.0 | 86.7 | 16 | MID | | | | | | | | | | | | 264 | | | | DH59 |
| APR 15 | 08:00 | 9.0 | 89.2 | 19 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 17 | 06:45 | 11.0 | 84.5 | 14 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 19 | 05:45 | 12.0 | 98.1 | 9 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 21 | 06:45 | 10.0 | 79.4 | 12 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 22 | 11:45 | 10.0 | 82.8 | 12 | MID | | | | | | | | | | | | 236 | | | | DH59 |
| APR 24 | 05:45 | 9.0 | 88.1 | 6 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 26 | 08:00 | 7.0 | 72.5 | 21 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 28 | 05:45 | 8.0 | 80.5 | 14 | MID | | | | | | | | | | | | | | | | DH59 |
| APR 29 | 14:00 | 8.0 | 72.5 | 10 | MID | | | | | | | | | | | | 248 | | | | DH59 |
| MAY 01 | 08:30 | 7.0 | 84.4 | 7 | MID | | | | | | | | | | | | 252 | | | | DH59 |
| MAY 03 | 07:15 | 8.0 | 80.7 | 8 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 05 | 11:45 | 10.0 | 30.0 | 5 | MID | | | | | | | | | | | | 257 | | | | DH59 |
| MAY 08 | 15:30 | 8.0 | 28.7 | 13 | MID | | | | | | | | | | | | 254 | | | | DH59 |
| MAY 10 | 05:45 | 8.0 | 23.2 | 10 | MID | | | | | | | | | | | | 257 | | | | DH59 |
| MAY 12 | 07:00 | 10.0 | 20.5 | 8 | MID | | | | | | | | | | | | 271 | | | | DH59 |
| MAY 13 | 05:45 | 11.0 | 18.6 | 5 | MID | | | | | | | | | | | | 288 | | | | DH59 |
| MAY 15 | 09:20 | 11.0 | 21.0 | 8 | MID | | | | | | | | | | | | 246 | | | | DH59 |
| MAY 15 | 10:00 | 11.0 | 21.0 | 13 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 16 | 07:30 | 10.0 | 25.2 | 92 | MID | | | | | | | | | | | | 271 | | | | DH59 |
| MAY 17 | 07:15 | 9.0 | 34.0 | 76 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 18 | 07:15 | 9.0 | 32.0 | 41 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 19 | 05:30 | 9.0 | 24.1 | 19 | MID | | | | | | | | | | | | 262 | | | | DH59 |
| MAY 20 | 17:30 | 11.0 | 25.9 | 17 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 21 | 05:45 | 10.0 | 28.3 | 18 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 22 | 08:00 | 9.0 | 89.5 | 91 | MID | | | | | | | | | | | | 295 | | | | DH59 |
| MAY 23 | 06:15 | 10.0 | 85.9 | 54 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 24 | 07:30 | 10.0 | 78.8 | 44 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 25 | 06:15 | 9.0 | 76.9 | 21 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 26 | 08:00 | 8.0 | 84.5 | 32 | MID | | | | | | | | | | | | 329 | | | | DH59 |
| MAY 27 | 10:00 | 10.0 | 83.5 | 25 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 28 | 07:15 | 10.0 | 75.5 | 23 | MID | | | | | | | | | | | | 282 | | | | DH59 |
| MAY 29 | 07:30 | 11.0 | 74.5 | 22 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 30 | 06:30 | 10.0 | 73.2 | 21 | MID | | | | | | | | | | | | | | | | DH59 |
| MAY 31 | 07:00 | 12.0 | 88.0 | 34 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 01 | 16:00 | 13.0 | 86.3 | 29 | MID | | | | | | | | | | | | 239 | | | | DH59 |
| JUN 02 | 09:00 | 11.0 | 86.1 | 21 | MID | | | | | | | | | | | | 233 | | | | DH59 |
| JUN 03 | 09:30 | 13.0 | 85.2 | 16 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 04 | 17:00 | 14.0 | 77.5 | 21 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 05 | 12:40 | 14.0 | 126 | 59 | MID | | | | | | | | | | | | 242 | | | | DH59 |
| JUN 05 | 18:15 | 14.0 | 128 | 84 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 06 | 09:30 | 14.0 | 115 | 84 | MID | | | | | | | | | | | | 267 | | | | DH59 |
| JUN 07 | 07:30 | 15.0 | 104 | 54 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 08 | 07:00 | 13.0 | 88.4 | 81 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 09 | 13:15 | 15.0 | 90.0 | 54 | MID | | | | | | | | | | | | 230 | | | | DH59 |
| JUN 10 | 10:00 | 15.0 | 82.9 | 51 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 11 | 15:00 | 17.0 | 87.1 | 40 | MID | | | | | | | | | | | | 221 | | | | DH59 |
| JUN 12 | 07:45 | 16.0 | 98.5 | 51 | MID | | | | | | | | | | | | 220 | | | | DH59 |
| JUN 13 | 10:00 | 18.0 | 131 | 108 | MID | | | | | | | | | | | | 224 | | | | DH59 |
| JUN 14 | 08:30 | 17.0 | 198 | 207 | MID | | | | | | | | | | | | 234 | | | | DH59 |
| JUN 15 | 10:00 | 18.0 | 194 | 113 | MID | | | | | | | | | | | | 245 | | | | DH59 |
| JUN 17 | 17:30 | 19.0 | 158 | 198 | MID | | | | | | | | | | | | 227 | | | | DH59 |
| JUN 18 | 16:30 | 20.0 | 183 | 152 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 19 | 08:15 | 18.0 | 210 | 177 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 20 | 08:30 | 19.0 | 245 | 211 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 21 | 07:00 | 17.0 | 350 | 170 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 22 | 08:15 | 17.0 | 330 | 298 | MID | | | | | | | | | | | | 211 | | | | DH59 |
| JUN 23 | 20:00 | 18.0 | 261 | 371 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 24 | 10:00 | 18.0 | 257 | 414 | MID | | | | | | | | | | | | 202 | | | | DH59 |
| JUN 25 | 07:00 | 17.0 | 234 | 361 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 26 | 08:00 | 17.0 | 223 | 486 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 26 | 15:15 | 22.0 | 223 | 527 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 26 | 15:16 | 22.0 | 223 | 500 | MID | | | | | | | | | | | | 222 | | | | DH59 |
| JUN 28 | 07:00 | 19.0 | 184 | 142 | MID | | | | | | | | | | | | 217 | | | | DH59 |
| JUN 29 | 08:00 | 18.0 | 202 | 218 | MID | | | | | | | | | | | | | | | | DH59 |
| JUN 30 | 05:45 | 19.0 | 189 | 180 | MID | | | | | | | | | | | | | | | | DH59 |
| JUL 01 | 10:30 | 17.0 | 189 | 120 | MID | | | | | | | | | | | | | | | | DH59 |
| JUL 01 | 10:31 | 7.0 | 189 | 204 | C MID | | | | | | | | | | | | 195 | | | | DH59 |
| JUL 04 | 08:00 | 17.0 | 231 | 112 | MID | | | | | | | | | | | | 200 | | | | DH59 |
| JUL 04 | 08:01 | 7.0 | 231 | 189 | C MID | | | | | | | | | | | | 182 | | | | DH59 |
| JUL 07 | 07:00 | 17.0 | 229 | 114 | MID | | | | | | | | | | | | 188 | | | | DH59 |
| JUL 07 | 07:01 | 7.0 | 229 | 348 | C MID | | | | | | | | | | | | 179 | | | | DH59 |
| JUL 08 | 07:15 | 16.0 | 202 | 97 | MID | | | | | | | | | | | | 192 | | | | DH59 |
| JUL 08 | 07:16 | 16.0 | 202 | 101 | MID | | | | | | | | | | | | 187 | | | | DH59 |
| JUL 10 | 10:50 | 20.0 | 111 | 34 | MID | | | | | | | | | | | | 169 | | | | DH59 |
| JUL 10 | 10:51 | 20.0 | 111 | 35 | MID | | | | | | | | | | | | 161 | | | | DH59 |
| JUL 11 | 15:00 | 21.0 | 81.1 | 20 | MID | | | | | | | | | | | | 180 | | | | DH59 |
| JUL 11 | 15:01 | 21.0 | 81.1 | 22 | MID | | | | | | | | | | | | 169 | | | | DH59 |
| JUL 14 | 13:45 | 19.0 | 81.0 | Y 23 | MID | | | | | | | | | | | | 161 | | | | DH59 |
| JUL 14 | 13:46 | 19.0 | 81.0 | Y 20 | MID | | | | | | | | | | | | 178 | | | | DH59 |
| JUL 15 | 10:30 | 20.0 | 78.4 | Y 15 | MID | | | | | | | | | | | | 177 | | | | DH59 |
| JUL 16 | 13:30 | 20.0 | 82.4 | Y 10 | MID | | | | | | | | | | | | | | | | DH59 |
| JUL 21 | 18:30 | 16.0 | 46.5 | Y 9 | MID | | | | | | | | | | | | | | | | DH59 |
| JUL 22 | 11:45 | 16.0 | 39.2 | Y 8 | MID | | | | | | | | | | | | 200 | | | | DH59 |
| JUL 24 | 14:42 | 22.0 | 34.5 | Y 5 | MID | | | | | | | | | | | | | | | | DH59 |
| JUL 26 | 18:30 | 23.0 | 34.4 | 5 | MID | | | | | | | | | | | | | | | | DH59 |
| JUL 29 | 10:45 | 21.0 | 36.0 | 8 | MID | | | | | | | | | | | | | | | | DH59 |
| AUG 06 | 11:00 | 24.0 | 81.5 | 44 | MID | | | | | | | | | | | | | | | | DH59 |
| AUG 13 | 10:30 | 22.0 | 46.8 | 14 | MID | | | | | | | | | | | | 241 | | | | DH59 |
| AUG 13 | 10:31 | 22.0 | 46.8 | 17 | MID | | | | | | | | | | | | 224 | | | | DH59 |
| AUG 16 | 11:00 | 23.0 | 37.5 | 13 | MID | | | | | | | | | | | | 215 | | | | DH59 |
| AUG 28 | 10:45 | 21.0 | 28.6 | 11 | MID | | | | | | | | | | | | | | | | DH59 |
| AUG 31 | 09:30 | 17.0 | 27.0 | Y 10 | MID | | | | | | | | | | | | | | | | DH59 |
| SEP 09 | 10:00 | 10.0 | 38.0 | 139 | MID | | | | | | | | | | | | 285 | | | | DH59 |
| SEP 11 | 13:02 | 9.0 | 38.0 | 12 | MID | | | | | | | | | | | | | | | | DH59 |
| SEP 16 | 10:00 | 12.0 | 41.2 | 13 | MID | | | | | | | | | | | | | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN Y - DAILY MEAN; MANUAL GAUGE Y - DAILY MEAN; ESTIMATED
CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

CONTINUED

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SEP 25 | 13:30 | 7.0 | 24.7 | 26 | MID | | | | | | | | | | | | | | | | DH59 |
| SEP 30 | 13:00 | 13.0 | 49.5 | 17 | MID | | | | | | | | | | | | 282 | | | | DH59 |
| OCT 02 | 10:50 | 8.0 | 40.3 | 18 | 100 X | | | | | | | | | | | | 280 | | | | DH48 |
| OCT 07 | 14:00 | 12.0 | 28.7 | 12 | MID | | | | | | | | | | | | | | | | DH59 |
| OCT 13 | 12:00E | | 34.2 H | 21 | MID | | | | | | | | | | | | 323 | | | | DH59 |
| OCT 21 | 12:00E | | 36.3 H | 31 | MID | | | | | | | | | | | | 317 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

TIME SYMBOL: E - ESTIMATED
DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : APR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1966 | APR-DEC | M-S | 1 880 | JUN 08 | 8 | SEP 19 | 185 000 | JUN 08 | 2 430 000 | --- | --- | --- |
| 1967 | JAN-DEC | M-C | 3 880 | MAY 11 | 5 | SEP 06 | 884 000 | JUN 03 | 7 480 000 * | 34 700 | 34 700 | --- |
| 1968 | JAN-DEC | M-C | 2 020 | JUN 09 | 3 | AUG 11 | 107 000 | JUN 08 | 1 180 000 | 5 330 | 20 000 | 73.4 |
| 1969 | JAN-DEC | M-C | 3 290 | JUN 30 | 4 | SEP 23 | 452 000 | JUL 02 | 4 550 000 | 20 600 | 20 200 | 42.0 |
| 1970 | JAN-DEC | M-C | 3 740 | JUN 17 | 2 | SEP 06 * | 417 000 | JUN 17 | 2 700 000 | 12 500 | 18 300 | 36.6 |
| 1971 | JAN-DEC | M-C | 1 840 | JUN 10 | 2 | SEP 05 | 170 000 | JUN 10 | 2 350 000 | 10 800 | 18 800 | 30.4 |
| 1972 | JAN-DEC | M-C | 4 180 | MAR 16 | 3 | JAN 27 | 281 000 | JUN 04 | 4 720 000 | 19 500 | 17 200 | 34.4 |
| 1973 | JAN-DEC | M-C | 1 450 | JUN 17 | 2 | JAN 10 | 46 100 | JUN 17 | 720 000 | 3 270 | 15 200 | 26.7 |
| 1974 | JAN-DEC | M-C | 5 350 | MAY 04 | 2 | OCT 19 | 350 000 | MAY 04 | 4 080 000 | 18 000 | 15 700 | 22.6 |
| 1975 | JAN-DEC | M-C | 8 100 | JUN 23 * | 2 | JAN 07 | 1 880 000 | JUN 23 * | 7 450 000 | 34 700 | 17 800 | 21.2 |
| 1976 | JAN-DEC | M-C | 1 310 | MAY 15 | 2 | SEP 25 | 70 800 | AUG 10 | 1 300 000 | 5 850 | 15 800 | 21.8 |
| 1977 | JAN-DEC | M-C | 1 300 | JUN 16 | 3 | APR 29 | 29 800 | JUN 15 | 120 000 | 488 | 15 100 | 23.6 |
| 1978 | JAN-DEC | M-C | 1 870 | JUN 03 | 8 | AUG 13 | 86 700 | JUN 10 | 2 450 000 | 10 400 | 14 800 | 22.1 |
| 1979 | APR-OCT | M-S | 1 720 | MAY 30 | 2 | SEP 01 | 102 000 | MAY 30 | 1 180 000 | 5 400 | 14 000 | 22.1 |
| 1980 | APR-OCT | M-S | 4 130 | MAY 30 | 7 | SEP 02 | 358 000 | MAY 30 | 2 150 000 | 10 100 | 13 800 | 20.8 |
| 1981 | MAR-NOV # | M-S | 4 430 | MAY 19 | 11 | SEP 22 | 579 000 | MAY 25 | 4 590 000 | 21 400 | 14 300 | 19.1 |
| 1982 | APR-OCT | M-S | 2 000 | JUL 08 | 8 | SEP 12 | 93 500 | JUL 08 | 1 570 000 | --- | --- | --- |
| 1983 | MAR-OCT # | M-S | 2 720 | JUL 21 | 4 | SEP 25 | 43 900 | JUL 21 | 415 000 | 1 940 | 13 500 | 19.7 |
| 1984 | APR-OCT | M-S | 527 | JUN 26 | 5 | MAY 05 | 9 100 | JUN 26 | 117 000 | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT - STATION NO. 05AJ001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 05 | 12:15 | 6.0 | 87.6 | 18 | MID | | | | | | | | | | | | 258 | | | | DH59 |
| APR 27 | 10:57 | 8.0 | 57.4 | 8 | MID | | | | | | | | | | | | 257 | | | | DH59 |
| MAY 15 | 15:40 | 12.0 | 28.6 | 4 | MID | | | | | | | | | | | | 284 | | | | DH59 |
| JUN 06 | 09:30 | 2.0 | 81.1 H | 42 | MID | | | | | | | | | | | | 219 | | | | DIP |
| JUN 27 | 11:15 | 18.0 | 187 | 90 | MID | | | | | | | | | | | | 204 | | | | DH59 |
| JUL 23 | 14:20 | 22.0 | 32.2 | 8 | MID | | | | | | | | | | | | 230 | | | | DH59 |
| SEP 10 | 15:30 | 8.0 | 35.7 | 113 | MID | | | | | | | | | | | | 318 | | | | DH59 |
| SEP 10 | 15:31 | 8.0 | 35.7 | 86 | MID | | | | | | | | | | | | 337 | | | | DH59 |
| OCT 01 | 12:10 | 8.0 | 29.8 | 15 | MID | | | | | | | | | | | | 283 | | | | D49 |
| OCT 28 | 13:45 | 0.0 | 15.6 | 13 | MID | | | | | | | | | | | | 340 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): H - DAILY MEAN

SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT - STATION NO. 05AJ001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | JUL-OCT # | M-MS | 88 | JUL 15 | 8 | SEP 11 | --- | | --- | --- | --- | --- |
| 1975 | MAY-OCT # | M-MS | 2 930 | JUN 23 | 5 | SEP 15 | --- | | --- | --- | --- | --- |
| 1976 | MAR-OCT # | M-MS | 493 | MAY 11 | 1 | MAY 05 * | --- | | --- | --- | --- | --- |
| 1977 | MAR-OCT # | M-MS | 53 | MAY 24 | 11 | JUN 29 | --- | | --- | --- | --- | --- |
| 1978 | MAR-DEC # | M-MS | 845 | MAR 30 | 11 | DEC 12 | --- | | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 808 | MAY 31 | 4 | JUL 31 | --- | | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 3 020 | MAY 29 * | 24 | AUG 29 | --- | | --- | --- | --- | --- |
| 1981 | MAR-SEP # | M-MS | 1 780 | MAY 26 | 17 | SEP 26 | --- | | --- | --- | --- | --- |
| 1982 | JUN-OCT # | M-MS | 348 | JUN 23 | 42 | OCT 27 | --- | | --- | --- | --- | --- |
| 1983 | MAR-NOV # | M-MS | 387 | JUN 02 | 8 | SEP 28 | --- | | --- | --- | --- | --- |
| 1984 | APR-OCT | M-MS | 113 | SEP 10 | 4 | MAY 15 | --- | | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

SPRAY RIVER AT BANFF - STATION NO. 05BC001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAY-AUG MEAN LOAD (TONNES) | SUMMARY : MAY-AUG HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAY-AUG STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-SEP | M-S | 118 | AUG 04 | 0 | MAY 10 * | 89.0 | AUG 04 | 784 | 6.07 | 8.07 | --- |
| 1973 | MAY-AUG | M-S | 385 | MAY 31 | 2 | JUL 16 | 382 | MAY 31 | 4 050 | 33.0 | 19.5 | 89.1 |
| 1974 | MAY-AUG | M-S | 892 | JUL 30 * | 5 | JUN 30 | 1 780 | JUL 29 * | 20 400 * | 188 | 88.4 | 72.3 |
| 1975 | MAY-AUG # | M-MS | 112 | JUL 30 | 2 | MAY 29 | --- | | --- | --- | --- | --- |
| 1976 | MAY-OCT # | M-MS | 13 | AUG 24 | 1 | JUL 26 | --- | | --- | --- | --- | --- |
| 1977 | APR-NOV # | M-MS | 13 | JUL 26 | 0 | NOV 03 | --- | | --- | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

SPRING CREEK (UPPER) NEAR VALLEYVIEW - STATION NO. 07GF004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | MAY-DEC | M-S | 26 | JUN 02 | 5 | MAY 18 | 1.88 | JUN 18 | 6.42 | --- | --- | --- |
| 1968 | APR-JUL # | M-MS | 128 | MAY 16 * | 5 | JUN 04 | --- | | --- | --- | --- | --- |
| 1969 | MAY-AUG | M-S | 33 | JUL 03 | 5 | JUN 08 | 0.80 | MAY 01 | 2.80 | --- | --- | --- |
| 1970 | JAN-OCT | M-S | 14 | APR 08 | 0 | JUL 05 * | 0.85 | MAY 11 | 5.38 | 0.03 | 0.03 | --- |
| 1971 | MAR-OCT | M-S | 31 | APR 07 | 4 | JUN 29 | 10.7 | JUL 12 | 47.4 | 0.30 | 0.12 | 71.0 |
| 1972 | MAR-OCT | M-S | 33 | JUL 26 | 0 | AUG 31 | 29.4 | JUN 26 * | 86.3 * | 0.38 | 0.30 | 47.7 |
| 1973 | MAR-NOV | M-S | 33 | SEP 15 | 5 | MAY 03 | 10.7 | APR 24 | 74.4 | 0.31 | 0.33 | 31.6 |
| 1974 | MAR-NOV | M-S | 17 | JUL 16 | 0 | NOV 07 | 4.87 | APR 26 | 48.7 | 0.21 | 0.22 | 28.8 |
| 1975 | MAY-JUL # | M-MS | 14 | JUN 16 | 8 | JUL 08 | --- | | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 41 | APR 27 | 5 | SEP 19 | --- | | --- | --- | --- | --- |
| 1979 | MAY-SEP # | M-MS | 95 | AUG 08 | 8 | MAY 14 | --- | | --- | --- | --- | --- |
| 1980 | APR-NOV # | M-MS | 68 | APR 21 | 5 | JUN 09 | --- | | --- | --- | --- | --- |
| 1981 | MAR-OCT # | M-MS | 56 | JUL 06 | 4 | MAY 27 | --- | | --- | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

ALBERTA

SPRING CREEK NEAR VALLEYVIEW - STATION NO. 07GF002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | MAY-SEP | M-S | 540 | MAY 02 | 11 | JUL 14 | 486 | MAY 01 | 1 810 | --- | --- | --- |
| 1968 | MAY-OCT | M-S | 784 | JUN 13 | 4 | AUG 19 | 303 | JUN 13 | 1 170 | --- | --- | --- |
| 1969 | MAR-OCT | M-S | 1 300 | JUL 18 | 9 | JUN 12 | 156 | JUL 18 | 1 130 | 4.60 | 4.60 | --- |
| 1970 | MAR-OCT | M-S | 271 | APR 22 | 0 | JUL 30 * | 66.8 | APR 22 | 328 | 1.34 | 2.97 | 84.9 |
| 1971 | MAR-OCT | M-S | 785 | JUL 13 | 4 | APR 07 | 624 | JUL 13 | 3 190 | 13.0 | 6.31 | 55.0 |
| 1972 | MAR-OCT | M-S | 885 | APR 27 | 5 | AUG 31 | 418 | APR 26 | 2 150 | 8.91 | 6.95 | 36.5 |
| 1973 | MAR-NOV | M-S | 548 | APR 24 | 10 | AUG 30 | 220 | APR 24 | 1 450 | 5.85 | 5.75 | 29.3 |
| 1974 | MAR-OCT | M-S | 1 420 | APR 23 | 0 | AUG 08 | 1 830 | APR 24 * | 10 200 * | 41.8 | 12.8 | 48.1 |
| 1975 | MAY-JUL | M-S | 130 | JUN 28 | 12 | JUN 18 | 25.6 | JUN 29 | 139 | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 829 | APR 30 | 8 | AUG 30 | | --- | --- | --- | --- | --- |
| 1979 | MAY-AUG # | M-MS | 1 570 | MAY 18 | 34 | JUL 20 | | --- | --- | --- | --- | --- |
| 1980 | APR-NOV # | M-MS | 571 | APR 17 | 14 | NOV 05 | | --- | --- | --- | --- | --- |
| 1981 | MAR-AUG # | M-MS | 1 700 | APR 23 * | 13 | AUG 10 | | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ST. MARY RIVER AT INTERNATIONAL BOUNDARY - STATION NO. 05AE027

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1977 | APR-MAY # | M-MS | 45 | APR 25 | 29 | MAY 10 * | --- | --- | --- | --- | --- |
| 1978 | MAY-JUN # | M-MS | 385 | JUN 06 * | 97 | JUN 12 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

STEEPBANK RIVER NEAR FORT MCMURRAY - STATION NO. 07DA005

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 24 | 13:20 | 12.0 | 4.42 | 15 | MID | | | | | | | | | | | | 189 | | | | DH48 |
| AUG 11 | 10:20 | 20.0 | 13.5 | 75 | 15.0 | | | | | | | | | | | | 172 | | | | DH48 |
| AUG 11 | 10:21 | 20.0 | 13.5 | 62 | 15.0 | | | | | | | | | | | | 189 | | | | DH48 |
| SEP 21 | 10:15 | 10.0 | 7.68 | 4 | MID | | | | | | | | | | | | 171 | | | | DH48 |
| SEP 21 | 10:16 | 10.0 | 7.56 | 2 | MID | | | | | | | | | | | | 178 | | | | DH48 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

STEEPBANK RIVER NEAR FORT MCMURRAY - STATION NO. 07DA008

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1975 | JUN-OCT # | M-MS | 741 | JUL 19 * | 24 | JUN 24 | --- | --- | --- | --- | --- |
| 1976 | APR-NOV # | M-MS | 709 | APR 15 | 5 | NOV 05 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 431 | APR 16 | 3 | SEP 22 | --- | --- | --- | --- | --- |
| 1978 | APR-SEP # | M-MS | 251 | MAY 01 | 6 | JUL 24 | --- | --- | --- | --- | --- |
| 1979 | MAY-OCT # | M-MS | 118 | MAY 30 | 5 | AUG 22 | --- | --- | --- | --- | --- |
| 1980 | APR-OCT # | M-MS | 126 | SEP 19 | 5 | JUN 27 | --- | --- | --- | --- | --- |
| 1981 | MAY-AUG # | M-MS | 50 | JUL 15 | 3 | AUG 28 | --- | --- | --- | --- | --- |
| 1982 | MAY-SEP # | M-MS | 120 | MAY 19 | 3 | JUN 25 | --- | --- | --- | --- | --- |
| 1983 | JUN-SEP # | M-MS | 11 | JUN 23 | 3 | AUG 07 | --- | --- | --- | --- | --- |
| 1984 | MAY-SEP | M-MS | 75 | AUG 11 | 2 | SEP 21 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

STIMSON CREEK NEAR PEKISKO - STATION NO. 05BL007

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-MAY # | M-MS | 787 | APR 07 * | 13 | MAY 22 # | --- | --- | --- | --- | --- |
| 1976 | MAY-MAY | M-MS | 25 | MAY 13 | 25 | MAY 13 | --- | --- | --- | --- | --- |
| 1977 | MAY-MAY # | M-MS | 21 | MAY 17 | 18 | MAY 24 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

STREETER CREEK (MAIN STEM) NEAR HANTON - STATION NO. 05AB030

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : JAN-DEC MEAN LOAD (TONNES) | SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES) | SUMMARY : JAN-DEC STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1986 | JUL-DEC | M-S | 16 | JUL 30 | 1 | SEP 15 * | 0.04 | JUL 05 | --- | --- | --- | --- |
| 1987 | JAN-DEC | M-C | 380 | MAY 19 | 3 | MAR 30 | 8.89 | JUN 03 | 75.2 | 0.21 | 0.21 | --- |
| 1988 | JAN-DEC | M-C | 83 | JUL 11 | 7 | JUN 13 | 0.39 | DEC 07 | 11.8 | 0.04 | 0.13 | 85.5 |
| 1989 | JAN-DEC | M-C | 432 | JUN 26 * | 3 | OCT 21 | 16.8 | JUN 27 * | 111 * | 0.31 | 0.18 | 41.4 |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION

S - SEASONAL OPERATION

* - EXTREME FOR PERIOD OF RECORD

ALBERTA

SWAN RIVER NEAR KINUSO - STATION NO. 07BJ001

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 55 19 00 N LONG 115 24 30 W
DRAINAGE AREA: 1 900 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 247 557.07 TONNES FOR THE PERIOD APR 01 TO OCT 15

REMARKS:

| | APR | | | MAY | | | JUN | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 6.76 B | 73 | 30.1 | 8.38 | 23 S | 12.8 | 39.0 | 478 | 1 800 | 1 |
| 2 | 5.21 B | 72 | 32.4 | 8.26 | 21 | 11.3 | 78.9 | 2 450 | 18 900 | 2 |
| 3 | 4.91 B | 64 | 27.2 | 8.43 | 23 S | 12.8 | 52.3 | 1 090 | 4 930 | 3 |
| 4 | 5.52 B | 60 | 28.6 | 7.63 | 25 | 15.2 | 38.8 | 284 | 947 | 4 |
| 5 | 5.88 B | 66 | 33.5 | 7.71 | 26 S | 18.7 | 32.1 | 141 | 391 | 5 |
| 6 | 7.58 B | 74 | 48.5 | 8.00 | 32 | 22.1 | 35.1 | 235 | 713 | 6 |
| 7 | 8.08 | 74 S | 51.7 | 7.91 | 30 S | 20.5 | 174 | 1 820 | 27 400 | 7 |
| 8 | 7.58 | 68 | 44.5 | 7.20 | 28 | 16.2 | 245 | 3 420 S | 72 400 | 8 |
| 9 | 7.48 | 64 S | 41.4 | 8.80 | 22 S | 13.1 | 139 | 1 780 S | 21 400 | 9 |
| 10 | 7.73 | 66 | 44.1 | 7.40 | 23 | 14.7 | 79.3 | 1 050 | 7 190 | 10 |
| 11 | 7.80 | 67 S | 45.2 | 8.38 | 26 S | 18.8 | 54.9 | 464 S | 2 200 | 11 |
| 12 | 7.87 | 65 S | 44.8 | 8.11 | 25 | 17.5 | 41.4 | 319 S | 1 140 | 12 |
| 13 | 8.05 | 80 S | 55.6 | 7.91 | 23 S | 15.7 | 35.0 | 241 S | 729 | 13 |
| 14 | 8.22 | 128 | 91.6 | 7.77 | 22 | 14.8 | 58.0 | 1 240 S | 6 210 | 14 |
| 15 | 10.0 | 237 S | 205 | 8.52 | 23 S | 16.9 | 42.8 | 498 | 1 840 | 15 |
| 16 | 20.2 | 388 | 886 | 10.1 | 153 | 134 | 30.9 | 202 S | 538 | 16 |
| 17 | 25.4 | 445 S | 977 | 48.2 | 1 850 S | 5 500 | 27.2 | 163 S | 383 | 17 |
| 18 | 18.3 | 277 | 482 | 56.5 | 1 130 S | 5 470 | 23.7 | 141 S | 289 | 18 |
| 19 | 16.5 | 227 S | 324 | 39.2 | 892 S | 2 010 | 18.9 | 88 S | 151 | 19 |
| 20 | 14.3 | 159 | 196 | 37.8 | 818 S | 2 020 | 16.3 | 82 S | 130 | 20 |
| 21 | 14.2 | 147 S | 180 | 47.7 | 707 S | 2 910 | 15.7 | 74 S | 107 | 21 |
| 22 | 15.8 | 130 | 177 | 57.8 | 801 S | 4 000 | 14.4 | 86 | 82.1 | 22 |
| 23 | 14.8 | 95 S | 120 | 59.3 | 849 S | 4 350 | 12.7 | 80 S | 85.8 | 23 |
| 24 | 12.3 | 80 | 85.0 | 62.8 | 782 S | 4 140 | 12.3 | 58 | 61.6 | 24 |
| 25 | 10.4 | 77 S | 69.2 | 62.4 | 626 S | 3 370 | 11.1 | 51 | 48.9 | 25 |
| 26 | 9.25 | 60 | 48.0 | 50.5 | 391 S | 1 710 | 9.33 | 42 | 33.8 | 26 |
| 27 | 8.07 | 45 S | 31.4 | 41.2 | 289 | 1 060 | 8.24 | 35 | 24.9 | 27 |
| 28 | 7.11 | 30 | 18.4 | 34.8 | 283 S | 781 | 7.51 | 23 S | 18.8 | 28 |
| 29 | 7.21 | 28 S | 17.4 | 29.5 | 210 | 535 | 8.97 | 24 | 14.5 | 29 |
| 30 | 8.55 | 24 | 13.6 | 25.0 | 142 | 319 | 8.93 | 48 | 37.0 | 30 |
| 31 | | | | 24.0 | 92 | 191 | | | | 31 |
| TOTAL | 307.88 | | 4 239.3 | 788.88 | | 39 750.9 | 1 374.58 | | 187 976.5 | TOTAL |

| | JUL | | | AUG | | | SEP | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 43.9 | 946 S | 3 590 | 2.40 E | 19 | 3.84 | 5.34 | 23 | 10.3 | 1 |
| 2 | 36.8 | 978 | 1 940 | 2.36 A | 16 S | 3.93 | 5.12 | 16 | 7.98 | 2 |
| 3 | 20.1 | 180 S | 313 | 2.20 E | 12 | 3.28 | 5.86 | 21 | 10.3 | 3 |
| 4 | 14.6 | 81 | 115 | 2.20 E | 10 | 1.90 | 7.21 | 86 | 41.1 | 4 |
| 5 | 11.5 | 74 | 73.5 | 2.20 E | 14 | 3.88 | 8.84 | 57 S | 32.2 | 5 |
| 6 | 13.0 | 88 S | 77.5 | 3.30 E | 72 | 20.5 | 5.83 | 41 | 20.7 | 6 |
| 7 | 31.3 | 188 S | 348 | 4.80 E | 174 | 72.2 | 30.1 A | 1 470 S | 2 850 | 7 |
| 8 | 31.3 | 574 1 | 440 | 7.00 E | 308 | 184 | 38.0 E | 1 730 | 5 880 | 8 |
| 9 | 33.7 | 718 S | 2 080 | 8.43 A | 201 S | 94.1 | 58.0 A | 817 S | 3 080 | 9 |
| 10 | 35.8 | 487 | 1 090 | 8.00 E | 147 | 63.5 | 38.1 A | 348 S | 1 090 | 10 |
| 11 | 18.3 | 278 | 439 | 5.00 E | 151 | 65.2 | 30.7 A | 382 S | 934 | 11 |
| 12 | 14.7 | 161 | 230 | 13.0 E | 232 | 249 | 28.1 | 289 | 853 | 12 |
| 13 | 22.4 | 291 | 563 | 26.3 A | 518 S | 1 260 | 26.9 | 385 S | 818 | 13 |
| 14 | 20.8 | 277 | 500 | 36.3 A | 895 S | 2 180 | 22.2 | 183 | 351 | 14 |
| 15 | 14.7 | 181 | 263 | 36.1 | 478 | 1 190 | 18.4 | 117 S | 186 | 15 |
| 16 | 11.0 | 138 | 138 | 24.2 | 277 | 579 | 15.4 | 80 | 106 | 16 |
| 17 | 9.18 | 90 | 71.4 | 17.5 | 143 S | 214 | 13.0 | 89 S | 88.3 | 17 |
| 18 | 7.98 | 53 | 36.5 | 12.3 | 79 | 84.0 | 11.3 | 45 | 43.9 | 18 |
| 19 | 8.83 | 32 S | 18.2 | 8.71 | 51 S | 42.8 | 10.2 | 36 | 31.7 | 19 |
| 20 | 7.73 | 48 | 32.1 | 8.11 | 44 | 34.8 | 8.83 | 29 | 22.4 | 20 |
| 21 | 7.13 | 37 | 22.8 | 11.7 | 71 | 71.8 | 7.88 | 24 | 16.8 | 21 |
| 22 | 7.21 | 35 | 21.6 | 12.5 | 88 | 95.0 | 7.38 | 22 | 14.0 | 22 |
| 23 | 8.16 | 88 | 54.5 | 8.84 | 45 | 37.5 | 7.23 | 21 S | 13.1 | 23 |
| 24 | 7.80 | 63 | 34.3 | 7.71 | 32 | 21.3 | 6.78 | 20 | 11.7 | 24 |
| 25 | 6.88 | 33 | 18.6 | 6.80 | 35 | 14.0 | 6.80 | 21 | 12.0 | 25 |
| 26 | 4.86 | 29 S | 12.4 | 5.72 | 18 | 8.80 | 6.80 | 21 | 12.3 | 26 |
| 27 | 4.38 | 27 S | 9.88 | 5.24 | 11 | 4.88 | 6.12 | 23 | 11.6 | 27 |
| 28 | 3.71 | 13 | 4.17 | 5.85 | 17 | 8.59 | 5.44 | 25 | 11.8 | 28 |
| 29 | 3.28 | 13 | 3.70 | 7.37 | 37 S | 23.8 | 5.83 | 30 S | 14.3 | 29 |
| 30 | 3.11 A | 13 | 3.49 | 7.20 | 35 | 21.8 | 5.74 | 28 | 14.4 | 30 |
| 31 | 2.85 E | 15 | 3.43 | 6.18 | 27 | 14.4 | | | | 31 |
| TOTAL | 439.30 | | 13 112.87 | 305.89 | | 8 838.48 | 438.83 | | 15 874.48 | TOTAL |

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SWAN RIVER NEAR KINUSO - STATION NO. 07BJ001

SUSPENDED SEDIMENT FOR 1984

| DAY | OCT DAILY DISCHARGE ($m^3/s$) | OCT MEAN CONCENTRATION (mg/L) | OCT DAILY LOAD (t) | NOV DAILY DISCHARGE ($m^3/s$) | NOV MEAN CONCENTRATION (mg/L) | NOV DAILY LOAD (t) | DEC DAILY DISCHARGE ($m^3/s$) | DEC MEAN CONCENTRATION (mg/L) | DEC DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.08 | 33 | 15.8 | | | | | | | 1 |
| 2 | 5.45 | 33 | 15.4 | | | | | | | 2 |
| 3 | 5.51 | 33 | 15.6 | | | | | | | 3 |
| 4 | 5.56 | 33 | 15.7 | | | | | | | 4 |
| 5 | 5.57 | 33 S | 15.2 | | | | | | | 5 |
| 6 | 5.03 | 29 | 15.1 | | | | | | | 6 |
| 7 | 5.44 | 25 | 11.6 | | | | | | | 7 |
| 8 | 5.08 | 22 | 9.62 | | | | | | | 8 |
| 9 | 4.77 | 19 | 7.63 | | | | | | | 9 |
| 10 | 4.48 | 17 | 6.59 | | | | | | | 10 |
| 11 | 4.27 | 15 S | 5.53 | | | | | | | 11 |
| 12 | 4.09 | 14 | 4.95 | | | | | | | 12 |
| 13 | 3.97 | 13 | 4.48 | | | | | | | 13 |
| 14 | 4.04 | 14 | 4.89 | | | | | | | 14 |
| 15 | 4.35 | 15 | 6.01 | | | | | | | 15 |
| 16 | 4.68 | 18 | 7.28 | | | | | | | 16 |
| 17 | 4.50 | | | | | | | | | 17 |
| 18 | 5.07 B | | | | | | | | | 18 |
| 19 | 11.5 B | | | | | | | | | 19 |
| 20 | 8.79 B | | | | | | | | | 20 |
| 21 | 7.89 B | | | | | | | | | 21 |
| 22 | 6.87 B | | | | | | | | | 22 |
| 23 | 6.82 B | | | | | | | | | 23 |
| 24 | 6.08 B | | | | | | | | | 24 |
| 25 | 6.72 B | | | | | | | | | 25 |
| 26 | 6.64 B | | | | | | | | | 26 |
| 27 | 5.17 B | | | | | | | | | 27 |
| 28 | 4.80 B | | | | | | | | | 28 |
| 29 | 4.55 B | | | | | | | | | 29 |
| 30 | 4.25 B | | | | | | | | | 30 |
| 31 | 4.00 B | | | | | | | | | 31 |
| TOTAL | 175.78 | | 174.75 | | | | | | | TOTAL |

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

SWAN RIVER NEAR KINUSO - STATION NO. 07BJ001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 19 | 16:10 | 0.0 | 0.476 B | 28 | MID X | | | | | | | | | | | | 237 | | | | DIP |
| APR 07 | 11:25 | 3.0 | 8.37 | 75 | 28.0 | | | | | | | | | | | | 137 | | | | DH59 |
| APR 09 | 16:00 | 5.0 | 7.70 | 84 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| APR 11 | 16:40 | 5.0 | 7.90 | 87 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| APR 12 | 17:15 | 5.0 | 7.87 | 85 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| APR 13 | 16:25 | 7.0 | 8.30 | 85 | 28.0 | | | | | | | | | | | | 141 | | | | DH59 |
| APR 15 | 18:00 | 9.0 | 11.5 | 280 C | 28.0 | | | | | | | | | | | | 140 | | | | DH59 |
| APR 17 | 16:00 | 7.0 | 25.7 | 453 | 28.0 | | | | | | | | | | | | 129 | | | | DH59 |
| APR 19 | 16:05 | 8.0 | 17.2 | 195 | 28.0 | 20 | 27 | 43 | 48 | 61 | 72 | 84 | 97 | 100 | | | 107 | 28 | 45 | 27 | DH59 |
| APR 21 | 17:20 | 9.0 | 15.8 | 156 | 28.0 | | | | | | | | | | | | 120 | | | | DH59 |
| APR 23 | 16:40 | 8.0 | 14.5 | 88 | 28.0 | | | | | | | | | | | | 123 | | | | DH59 |
| APR 25 | 16:10 | 8.0 | 10.1 | 75 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| APR 27 | 16:05 | 8.0 | 8.12 | 44 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| APR 29 | 10:00 | 6.0 | 7.40 | 28 | 28.0 | | | | | | | | | | | | 148 | | | | DH59 |
| MAY 01 | 19:00 | 10.0 | 6.20 | 22 | 28.0 | | | | | | | | | | | | 144 | | | | DH59 |
| MAY 03 | 16:00 | 10.0 | 6.48 | 23 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 05 | 06:45 | 11.0 | 7.49 | 27 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 07 | 16:45 | 11.0 | 7.68 | 28 | 28.0 | | | | | | | | | | | | 147 | | | | DH59 |
| MAY 09 | 16:00 | 11.0 | 6.68 | 22 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 11 | 16:10 | 10.0 | 8.64 | 27 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 13 | 08:55 | 9.0 | 8.05 | 23 | 28.0 | | | | | | | | | | | | 145 | | | | DH59 |
| MAY 15 | 15:20 | 12.0 | 8.71 | 23 | 28.0 | | | | | | | | | | | | 145 | | | | DH59 |
| MAY 17 | 14:00 | 7.5 | 82.5 | 2040 | 28.0 | 11 | 18 | 28 | 37 | 55 | 75 | 90 | 98 | 100 | | | 148 | | | | DH59 |
| MAY 18 | 12:00 | 7.0 | 58.4 | 1010 | 28.0 | | | | | | | | | | | | 147 | 24 | 58 | 18 | DH59 |
| MAY 19 | 09:00 | 10.0 | 40.6 | 801 | 28.0 | | | | | | | | | | | | 131 | | | | DH59 |
| MAY 20 | 17:00 | 9.0 | 40.8 | 705 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 21 | 12:30 | 9.0 | 46.9 | 672 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 22 | 18:40 | 8.0 | 62.0 | 857 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 23 | 16:05 | 8.0 | 57.3 | 628 | 28.0 | | | | | | | | | | | | 120 | | | | DH59 |
| MAY 24 | 20:10 | 8.0 | 67.5 | 770 | 28.0 | 14 | 17 | 29 | 34 | 47 | 60 | 79 | 97 | 100 | | | 120 | 40 | 43 | 17 | DH59 |
| MAY 25 | 13:30 | 7.5 | 83.2 | 807 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 25 | 18:10 | 9.0 | 80.0 | 583 | 28.0 | | | | | | | | | | | | 120 | | | | DH59 |
| MAY 26 | 08:15 | 8.0 | 52.4 | 401 C | 28.0 | | | | | | | | | | | | | | | | DH59 |
| MAY 28 | 16:45 | 11.0 | 33.6 | 283 C | 28.0 | | | | | | | | | | | | 113 | | | | DH59 |
| JUN 08 | 13:40 | | 254 | 3650 | 28.0 | | | | | | | | | | | | 115 | | | | DH59 |
| JUN 09 | 14:25 | 12.0 | 125 | 1530 | 28.0 | 14 | 18 | 29 | 38 | 55 | 75 | 90 | 98 | 100 | | | 142 | 25 | 57 | 18 | DH59 |
| JUN 09 | 16:45 | 11.0 | 118 | 1500 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 11 | 16:10 | 14.0 | 80.5 | 315 | 28.0 | 13 | 16 | 26 | 33 | 51 | 73 | 93 | 99 | 100 | | | 123 | 27 | 57 | 16 | DH59 |
| JUN 12 | 11:30 | 16.0 | 61.1 | 334 | 28.0 | | | | | | | | | | | | 127 | | | | DH59 |
| JUN 13 | 15:30 | 17.0 | 34.1 | 234 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 14 | 15:20 | 18.0 | 65.4 | 1550 | 28.0 | | | | | | | | | | | | 133 | | | | DH59 |
| JUN 16 | 18:15 | 15.0 | 28.8 | 185 | 28.0 | 21 | 33 | 48 | 57 | 71 | 78 | 87 | 98 | 100 | | | 143 | 21 | 46 | 33 | DH59 |
| JUN 17 | 10:45 | 13.0 | 27.2 | 162 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 18 | 18:25 | 12.0 | 22.3 | 132 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 19 | 17:45 | 13.0 | 19.3 | 77 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 20 | 15:00 | 14.0 | 18.0 | 84 | 28.0 | | | | | | | | | | | | 135 | | | | DH59 |
| JUN 21 | 16:00 | 15.0 | 16.3 | 72 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 23 | 09:40 | 17.0 | 12.8 | 80 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| JUN 28 | 14:40 | 20.0 | 7.45 | 27 | 28.0 | | | | | | | | | | | | 138 | | | | DH59 |
| JUL 01 | 11:15 | 13.0 | 84.4 | 1280 | 28.0 | 17 | 22 | 34 | 44 | 61 | 75 | 87 | 97 | 100 | | | 147 | | | | DH59 |
| JUL 03 | 10:35 | 14.0 | 20.3 | 174 | 28.0 | | | | | | | | | | | | 147 | 25 | 53 | 22 | DH59 |
| JUL 06 | 12:45 | 15.0 | 12.3 | 61 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| JUL 07 | 09:00 | 12.0 | 18.7 | 167 | 28.0 | | | | | | | | | | | | 145 | | | | DH59 |
| JUL 09 | 18:00 | 13.0 | 32.8 | 699 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| JUL 19 | 08:30 | 17.0 | 6.87 | 31 | 28.0 | | | | | | | | | | | | 136 | | | | DH59 |
| JUL 26 | 08:45 | 20.0 | 5.05 | 28 | 28.0 | | | | | | | | | | | | 145 | | | | DH59 |
| JUL 27 | 10:55 | 22.0 | 4.33 | 31 | 28.0 | | | | | | | | | | | | 151 | | | | DH59 |
| AUG 02 | 08:50 | 21.0 | 2.26 | 14 | 28.0 | | | | | | | | | | | | 151 | | | | DH59 |
| AUG 08 | 08:50 | 19.0 | 5.42 | 204 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| AUG 13 | 19:10 | 16.0 | 28.3 | 851 | 28.0 | 15 | 18 | 31 | 38 | 52 | 67 | 83 | 97 | 100 | | | 148 | 33 | 48 | 19 | DH59 |
| AUG 14 | 15:25 | 14.0 | 35.3 | 683 | 28.0 | | | | | | | | | | | | 173 | | | | DH59 |
| AUG 17 | 19:10 | 19.0 | 15.4 | 110 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| AUG 19 | 09:54 | 13.0 | 9.78 | 51 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| AUG 28 | 12:50 | 11.5 | 7.50 | 41 | 28.0 | | | | | | | | | | | | 158 | | | | DH59 |
| SEP 06 | 16:05 | 15.0 | 6.38 | 53 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| SEP 07 | 16:15 | 8.0 | 20.1 | 2480 | 28.0 | 9 | 13 | 21 | 28 | 45 | 62 | 78 | 93 | 100 | | | 131 | 38 | 49 | 13 | DH59 |
| SEP 09 | 09:55 | 8.0 | 58.0 | 622 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| SEP 10 | 17:00 | 8.0 | 36.1 | 307 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| SEP 11 | 17:34 | 10.0 | 30.5 | 323 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| SEP 13 | 15:08 | 10.0 | 24.5 | 257 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| SEP 15 | 15:10 | 12.0 | 17.9 | 108 | 28.0 | | | | | | | | | | | | 148 | | | | DH59 |
| SEP 17 | 15:24 | 14.0 | 12.7 | 58 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| SEP 23 | 15:48 | 9.0 | 7.27 | 21 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| SEP 28 | 15:30 | 10.0 | 5.28 | 28 | 28.0 | | | | | | | | | | | | 166 | | | | DH59 |
| OCT 05 | 17:37 | 14.0 | 8.51 | 32 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| OCT 11 | 16:00 | 15.0 | 4.22 | 15 | 28.0 | | | | | | | | | | | | | | | | DH59 |
| | | | | | | | | | | | | | | | | | 187 | | | | DH59 |

NOTE : SINGLE VERTICAL LOCATED AT 28.0 METRES

DISCHARGE SYMBOL(S): B - ICE CONDITIONS
CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

## SWAN RIVER NEAR KINUSO - STATION NO. 07BJ001

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : APR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1969 | MAY-OCT | M-S | 2 280 | SEP 05 | 5 | JUN 30 | 21 300 | SEP 05 | 70 400 | --- | --- | --- |
| 1970 | MAR-DEC | M-S | 2 190 | JUN 29 | 6 | AUG 28 | 35 000 | JUN 29 | 182 000 | 851 | 851 | --- |
| 1971 | JAN-DEC | M-C | 3 470 | JUN 18 | 8 | AUG 29 | 72 800 | JUL 04 | 748 000 | 3 480 | 2 170 | 80.8 |
| 1972 | JAN-DEC | M-C | 4 450 | JUN 18 | 6 | DEC 19 | 70 000 | JUN 18 | 400 000 | 1 870 | 2 070 | 37.1 |
| 1973 | JAN-DEC | M-C | 3 370 | MAY 21 | 9 | SEP 23 | 41 900 | MAY 21 | 344 000 | 1 810 | 1 960 | 28.3 |
| 1974 | JAN-DEC | M-C | 5 080 | JUL 13 | 10 | SEP 27 | 103 000 | JUL 13 | 818 000 | 2 420 | 2 050 | 21.5 |
| 1975 | APR-OCT | M-S | 4 020 | AUG 31 | 10 | OCT 29 | 88 700 | JUN 28 | 544 000 | 2 540 | 2 130 | 17.3 |
| 1976 | APR-OCT # | M-MS | 1 240 | JUL 03 | 32 | OCT 08 | | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 801 | APR 25 | 8 | OCT 27 | | --- | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 1 310 | APR 27 | 16 | OCT 25 | | --- | --- | --- | --- | --- |
| 1979 | APR-SEP | M-S | 8 010 | JUN 14 * | 14 | AUG 27 | 140 000 | JUN 14 | 884 000 * | --- | --- | --- |
| 1980 | FEB-OCT # | M-S | 1 600 | JUN 05 | 22 | JUN 18 | 21 700 | MAY 28 | 151 000 | 705 | 1 830 | 19.3 |
| 1981 | APR-OCT # | M-S | 2 180 | JUL 23 | 5 | AUG 28 | 16 500 | JUL 23 | 58 200 | --- | --- | --- |
| 1982 | APR-OCT | M-S | 2 240 | JUL 16 | 1 | OCT 23 * | 25 000 | JUL 16 | 259 000 | --- | --- | --- |
| 1983 | APR-OCT | M-S | 4 590 | JUN 20 | 7 | JUN 04 | 197 000 | JUN 28 * | 853 000 | --- | --- | --- |
| 1984 | MAR-OCT | M-S | 3 850 | JUN 08 | 14 | AUG 02 | 72 400 | JUN 08 | 248 000 | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## THREEPOINT CREEK NEAR MILLARVILLE - STATION NO. 05BL013

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAR-JUN # | M-MS | 473 | MAY 22 | 14 | APR 11 | --- | --- | --- | --- | --- |
| 1976 | MAY-SEP # | M-MS | 510 | AUG 05 * | 5 | AUG 03 * | --- | --- | --- | --- | --- |
| 1977 | MAY-MAY | M-MS | 19 | MAY 17 | 19 | MAY 17 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

## TOUGH CREEK NEAR BEAZER - STATION NO. 05AE038

### HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1980 | MAY-AUG # | M-MS | 94 | MAY 27 * | 18 | JUN 18 | --- | --- | --- | --- | --- |
| 1981 | JUN-SEP # | M-MS | 89 | JUL 20 | 14 | JUN 11 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

TWIN CREEK NEAR SEEBE - STATION NO. 05BF018

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAR-OCT HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1969 | JAN-DEC | M-C | 8 | APR 08 | 0 | APR 15 * | 0.37 | MAY 25 | 1.57 | | 0.01 | 0.01 | --- |
| 1970 | JAN-DEC | M-C | 20 | JUN 10 | 0 | JAN 05 | 0.37 | JUN 10 | 2.40 | | 0.01 | 0.01 | 0.0 |
| 1971 | JAN-DEC | M-C | 88 | JUN 08 * | 0 | JUN 01 | 9.88 | JUN 05 * | 15.7 * | | 0.08 | 0.03 | 78.2 |
| 1972 | JAN-DEC | M-C | 17 | JUN 10 | 0 | MAY 28 | 0.86 | JUN 10 | 4.40 | | 0.02 | 0.03 | 58.1 |
| 1973 | JAN-DEC | M-C | 11 | JUN 07 | 0 | FEB 20 | 0.38 | JUN 24 | 2.90 | | 0.02 | 0.03 | 44.1 |
| 1974 | JAN-DEC | M-C | 36 | JUN 17 | 0 | MAR 14 | 2.08 | JUN 17 | 8.41 | | 0.04 | 0.03 | 38.8 |
| 1975 | JAN-DEC # | M-S | 3 | JUN 04 | 0 | JUL 25 | 0.04 | JUN 12 | 0.27 | | --- | --- | --- |
| 1976 | MAY-DEC | M-S | 11 | JUN 08 | 0 | MAY 13 | 0.30 | JUN 08 | 2.38 | | --- | --- | --- |
| 1977 | JAN-DEC | M-C | 10 | JUN 01 | 0 | APR 28 | 0.15 | JUN 07 | --- | | 0 | 0.03 | 34.8 |
| 1978 | JAN-DEC | M-C | 18 | JUN 08 | 0 | MAY 31 | 0.58 | JUN 08 | 2.82 | | 0.02 | 0.03 | 30.2 |
| 1979 | JAN-NOV # | M-S | 8 | JUN 05 | 0 | JAN 17 | 0.18 | JUN 13 | 0.81 | | 0.01 | 0.02 | 40.4 |
| 1980 | MAR-OCT | M-S | 7 | MAY 26 | 1 | MAY 15 | 0.18 | MAY 27 | 4.50 | | 0.02 | 0.02 | 38.1 |
| 1981 | MAY-OCT | M-S | 10 | MAY 26 | 0 | MAY 17 | 0.43 | MAY 27 | 2.88 | | --- | --- | --- |
| 1982 | APR-OCT | M-S | 18 | JUN 19 | 0 | JUL 20 | 0.89 | JUN 19 | 4.71 | | --- | --- | --- |
| 1983 | MAY-SEP | M-S | 2 | JUN 01 | 0 | JUN 23 | 0.05 | MAY 29 | --- | | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION

S - SEASONAL OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

TWIN CREEK NEAR SEEBE - STATION NO. 05BF018

MONTHLY AND ANNUAL TOTAL VOLUMETRIC BED LOAD IN CUBIC METRES

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL | YEAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1969 | 0 | 0 | 0 | 0 | 0.8 | 2.1 | 0.8 | 0 | 0 | 0 | 0 | 0 | 3.7 | 1969 |
| 1970 | 0 | 0 | 0 | 0 | 0.2 | 1.8 | 0.5 | 0 | 0 | 0 | 0 | 0 | 2.5 | 1970 |
| 1971 | 0 | 0 | 0 | 0 | 1.1 | 5.4 | 1.8 | 0 | 0 | 0 | 0 | 0 | 8.3 | 1971 |
| 1972 | 0 | 0 | 0 | 0 | 0.1 | 4.7 | 0.4 | 0 | 0 | 0 | 0 | 0 | 5.2 | 1972 |
| 1973 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 1973 |
| 1974 | 0 | 0 | 0 | 0 | 0 | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1974 |
| 1975 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 1975 |
| 1976 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 1976 |
| 1977 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 1977 |
| 1978 | 0 | 0 | 0 | 0 | 0.1 | 1.0 | 0.3 | 0.1 | 0 | 0 | 0 | 0 | 1.5 | 1978 |
| MEAN | 0 | 0 | 0 | 0 | 0.3 | 2.0 | 0.4 | 0 | 0 | 0 | 0 | 0 | 2.8 | MEAN |

BED LOAD MEASURED BY VOLUMETRIC METHOD. MONTHLY DISTRIBUTION ESTIMATED.

VERMILION RIVER NEAR HAZELDINE - STATION NO. 05EE004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | APR-SEP # | M-MS | 135 | APR 08 | 6 | AUG 10 | --- | --- | --- | --- | --- |
| 1977 | JUL-OCT # | M-MS | 5 | AUG 17 | 2 | OCT 12 * | --- | --- | --- | --- | --- |
| 1978 | APR-SEP # | M-MS | 16 | APR 19 | 3 | AUG 22 | --- | --- | --- | --- | --- |
| 1979 | MAY-MAY | M-MS | 173 | MAY 15 * | 173 | MAY 15 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE

* - EXTREME FOR PERIOD OF RECORD

VERMILION RIVER NEAR MARWAYNE - STATION NO. 05EE007

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 08 | 17:20 | 10.0 | 0.842 | 18 | --- | | | | | | | | | | | | 517 | | | | DH48 |
| MAY 08 | 17:21 | 10.0 | 0.842 | 18 | --- | | | | | | | | | | | | 517 | | | | DH48 |
| JUN 08 | 08:48 | 15.0 | 1.39 | 12 | 13.7 | | | | | | | | | | | | 514 | | | | DH48 |
| JUN 08 | 08:47 | 15.0 | 1.39 | 10 | 13.7 | | | | | | | | | | | | 511 | | | | DH48 |
| JUL 11 | 10:15 | 20.0 | 0.233 | 14 | 8.2 | | | | | | | | | | | | 718 | | | | --- |
| AUG 14 | 18:40 | 22.0 | 0.010 | 19 | --- | | | | | | | | | | | | 731 | | | | --- |
| SEP 12 | 17:10 | 10.0 | 0.008 | 28 | --- | | | | | | | | | | | | 705 | | | | --- |
| OCT 23 | 18:45 | 0.0 | 0.048 | 8 | 5.0 | | | | | | | | | | | | 698 | | | | --- |
| NOV 07 | 08:40 | 0.0 | 0.038 | 45 | 3.9 | | | | | | | | | | | | 698 | | | | --- |

NOTE : SINGLE VERTICAL IS UNDETERMINED

VERMILION RIVER NEAR MARWAYNE - STATION NO. 05EE007

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1979 | AUG-AUG | M-MS | 0 | AUG 21 | 0 | AUG 21 * | --- | --- | --- | --- | --- |
| 1980 | APR-AUG # | M-MS | 233 | APR 18 * | 11 | JUN 24 | --- | --- | --- | --- | --- |
| 1981 | APR-JUN # | M-MS | 18 | APR 18 | 3 | AUG 22 | --- | --- | --- | --- | --- |
| 1982 | JUL-NOV # | M-MS | 77 | NOV 03 | 33 | AUG 11 | --- | --- | --- | --- | --- |
| 1983 | MAY-OCT # | M-MS | 108 | JUL 20 | 14 | JUN 09 | --- | --- | --- | --- | --- |
| 1984 | MAY-NOV | M-MS | 45 | NOV 07 | 8 | OCT 23 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

VERMILION RIVER NEAR VEGREVILLE - STATION NO. 05EE003

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAY 09 | 12:20 | 9.0 | 0.005 | 18 | MID | | | | | | | | | | | | 374 | | | | --- |
| MAY 09 | 12:21 | 9.0 | 0.005 | 19 | MID | | | | | | | | | | | | 373 | | | | --- |
| JUN 08 | 16:10 | 15.0 | 0.011 | 48 | 0.8 | | | | | | | | | | | | 450 | | | | --- |
| JUN 08 | 16:11 | 15.0 | 0.011 | 55 | 0.8 | | | | | | | | | | | | 419 | | | | --- |
| JUL 11 | 16:00 | 21.0 | 0.001 | 17 | --- | | | | | | | | | | | | 432 | | | | --- |

NOTE : SINGLE VERTICAL IS UNDETERMINED

ALBERTA

VERMILION RIVER NEAR VEGREVILLE - STATION NO. 05EE003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | OCT-OCT | M-MS | 5 | OCT 09 | 5 | OCT 09 * | --- | --- | --- | --- | --- |
| 1975 | OCT-OCT | M-MS | 5 | OCT 09 | 5 | OCT 09 | --- | --- | --- | --- | --- |
| 1976 | APR-APR # | M-MS | 38 | APR 06 | 15 | APR 28 | --- | --- | --- | --- | --- |
| 1978 | APR-MAY # | M-MS | 44 | APR 30 | 17 | MAY 10 | --- | --- | --- | --- | --- |
| 1979 | MAY-MAY | M-MS | 23 | MAY 14 | 23 | MAY 14 | --- | --- | --- | --- | --- |
| 1980 | APR-APR # | M-MS | 52 | APR 18 | 39 | APR 28 | --- | --- | --- | --- | --- |
| 1981 | MAY-MAY | M-MS | 7 | APR 23 | 5 | JUL 14 | --- | --- | --- | --- | --- |
| 1982 | JUL-SEP # | M-MS | 88 | JUL 07 * | 22 | AUG 12 | --- | --- | --- | --- | --- |
| 1983 | MAY-OCT # | M-MS | 51 | JUL 05 | 20 | SEP 29 | --- | --- | --- | --- | --- |
| 1984 | MAY-JUL | M-MS | 55 | JUN 06 | 17 | JUL 11 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE  * - EXTREME FOR PERIOD OF RECORD

WAMPUS CREEK NEAR HINTON - STATION NO. 07AF003

SUSPENDED SEDIMENT FOR 1984

LOCATION: LAT 53 09 22 N LONG 117 15 40 W
DRAINAGE AREA: 25.6 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 108.61 TONNES FOR THE PERIOD MAR 28 TO OCT 31

REMARKS:

| | MAR | | | APR | | | MAY | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | | | | 0.175 B | 8 | 0.14 | 0.284 B | 8 S | 0.20 | 1 |
| 2 | | | | 0.200 B | 10 | 0.17 | 0.274 B | 12 S | 0.28 | 2 |
| 3 | | | | 0.210 B | 10 S | 0.18 | 0.328 | 8 S | 0.23 | 3 |
| 4 | | | | 0.182 B | 22 | 0.35 | 0.328 A | 10 S | 0.28 | 4 |
| 5 | | | | 0.178 B | 24 | 0.37 | 0.344 A | 8 S | 0.24 | 5 |
| 6 | | | | 0.187 B | 25 S | 0.38 | 0.352 A | 15 S | 0.48 | 6 |
| 7 | | | | 0.158 B | 15 | 0.22 | 0.461 | 18 S | 0.72 | 7 |
| 8 | | | | 0.153 B | 12 | 0.16 | 0.513 | 21 S | 0.93 | 8 |
| 9 | | | | 0.150 B | 10 | 0.13 | 0.515 | 34 S | 1.52 | 9 |
| 10 | | | | 0.150 B | 8 S | 0.08 | 0.417 | 15 S | 0.54 | 10 |
| 11 | | | | 0.150 B | 8 | 0.11 | 0.391 A | 4 S | 0.14 | 11 |
| 12 | | | | 0.174 B | 11 S | 0.17 | 0.373 A | 0 S | 0 | 12 |
| 13 | | | | 0.176 B | 4 S | 0.08 | 0.387 | 0 S | 0 | 13 |
| 14 | | | | 0.187 | 4 | 0.06 | 0.382 | 2 S | 0.05 | 14 |
| 15 | | | | 0.312 | 13 | 0.35 | 0.403 | 8 S | 0.28 | 15 |
| 16 | | | | 0.488 | 20 | 0.84 | 0.952 | 135 S | 11.1 | 16 |
| 17 | | | | 0.425 | 15 S | 0.59 | 0.938 | 70 S | 5.67 | 17 |
| 18 | | | | 0.379 | 14 S | 0.46 | 0.884 | 18 S | 1.12 | 18 |
| 19 | | | | 0.310 | 8 S | 0.24 | 0.555 | 10 S | 0.48 | 19 |
| 20 | | | | 0.318 | 10 | 0.27 | 0.489 | 5 S | 0.21 | 20 |
| 21 | | | | 0.381 | 8 | 0.28 | 0.433 | 5 S | 0.18 | 21 |
| 22 | | | | 0.327 | 10 | 0.28 | 0.380 | 7 S | 0.24 | 22 |
| 23 | | | | 0.308 | 10 | 0.27 | 0.412 | 3 S | 0.11 | 23 |
| 24 | | | | 0.280 B | 11 | 0.28 | 0.373 | 3 S | 0.10 | 24 |
| 25 | | | | 0.275 B | 10 | 0.24 | 0.340 | 2 S | 0.06 | 25 |
| 26 | | | | 0.219 | 8 S | 0.15 | 0.308 | 0 S | 0 | 26 |
| 27 | | | | 0.195 B | 5 | 0.08 | 0.303 | 2 S | 0.05 | 27 |
| 28 | 0.080 B | 5 S | 0.03 | 0.184 | 5 S | 0.03 | 0.270 | 7 S | 0.18 | 28 |
| 29 | 0.075 B | 6 | 0.04 | 0.182 B | 5 S | 0.05 | 0.251 | 2 S | 0.04 | 29 |
| 30 | 0.100 B | 7 | 0.06 | 0.202 B | 7 | 0.12 | 0.237 | 1 S | 0.02 | 30 |
| 31 | 0.145 B | 8 | 0.10 | | | | 0.247 | 4 S | 0.09 | 31 |
| TOTAL | 0 | | 0.23 | 7.181 | | 7.10 | 12.882 | | 25.85 | TOTAL |

| | JUN | | | JUL | | | AUG | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DAY | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAILY DISCHARGE (m³/s) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
| 1 | 0.239 | 3 S | 0.08 | 0.171 | 0 S | 0 | 0.053 | 0 S | 0 | 1 |
| 2 | 0.218 | 2 S | 0.04 | 0.180 | 1 S | 0.01 | 0.055 | 3 | 0.01 | 2 |
| 3 | 0.208 | 2 S | 0.04 | 0.148 | 3 S | 0.04 | 0.070 | 6 S | 0.04 | 3 |
| 4 | 0.208 | 2 S | 0.04 | 0.142 | 3 S | 0.04 | 0.088 | 5 | 0.04 | 4 |
| 5 | 0.242 | 2 S | 0.04 | 0.138 | 2 S | 0.02 | 0.074 | 3 | 0.02 | 5 |
| 6 | 0.421 | 8 S | 0.29 | 0.128 | 1 S | 0.01 | 0.081 | 3 S | 0.02 | 6 |
| 7 | 0.583 | 6 S | 0.25 | 0.124 | 6 S | 0.06 | 0.074 | 2 | 0.01 | 7 |
| 8 | 1.61 | 57 S | 13.5 | 0.114 | 3 S | 0.03 | 0.058 | 1 S | 0.01 | 8 |
| 9 | 1.41 | 40 S | 4.87 | 0.104 | 0 S | 0 | 0.051 | 1 | 0 | 9 |
| 10 | 0.883 | 5 S | 0.43 | 0.100 | 0 S | 0 | 0.051 | 3 S | 0.01 | 10 |
| 11 | 0.743 | 7 S | 0.45 | 0.091 | 0 S | 0 | 0.049 | 1 | 0 | 11 |
| 12 | 0.677 | 6 S | 0.35 | 0.104 | 1 S | 0.01 | 0.048 | 0 | 0 | 12 |
| 13 | 0.607 | 3 S | 0.16 | 0.138 | 2 S | 0.02 | 0.048 | 0 S | 0 | 13 |
| 14 | 0.617 | 4 S | 0.18 | 0.108 | 1 S | 0.01 | 0.051 | 0 | 0 | 14 |
| 15 | 0.632 | 5 S | 0.23 | 0.089 | 1 S | 0.01 | 0.049 | 0 | 0 | 15 |
| 16 | 0.641 | 4 S | 0.19 | 0.079 | 0 S | 0 | 0.045 | 0 | 0 | 16 |
| 17 | 0.638 | 8 S | 0.37 | 0.075 | 1 S | 0.01 | 0.041 | 0 | 0 | 17 |
| 18 | 0.484 | 3 S | 0.13 | 0.072 | 0 S | 0 | 0.038 | 0 S | 0 | 18 |
| 19 | 0.478 | 2 S | 0.08 | 0.071 | 2 S | 0.01 | 0.037 | 0 S | 0 | 19 |
| 20 | 0.418 | 1 S | 0.04 | 0.084 | 2 S | 0.01 | 0.038 | 0 | 0 | 20 |
| 21 | 0.373 | 2 S | 0.08 | 0.088 | 3 S | 0.03 | 0.038 | 1 S | 0 | 21 |
| 22 | 0.488 A | 4 S | 0.16 | 0.105 | 1 S | 0.01 | 0.034 | 0 | 0 | 22 |
| 23 | 0.340 A | 7 S | 0.21 | 0.082 | 1 S | 0.01 | 0.033 | 0 S | 0 | 23 |
| 24 | 0.270 | 7 S | 0.16 | 0.085 | 4 S | 0.03 | 0.038 | 0 S | 0 | 24 |
| 25 | 0.245 | 1 S | 0.02 | 0.081 | 1 S | 0.01 | 0.035 | 0 | 0 | 25 |
| 26 | 0.220 | 1 S | 0.02 | 0.077 | 0 S | 0 | 0.035 | 1 | 0 | 26 |
| 27 | 0.206 | 1 S | 0.02 | 0.085 | 0 | 0 | 0.034 A | 3 S | 0.01 | 27 |
| 28 | 0.188 | 1 S | 0.02 | 0.084 | 0 S | 0 | 0.081 A | 3 | 0.02 | 28 |
| 29 | 0.188 | 0 S | 0 | 0.085 | 0 | 0 | 0.040 A | 3 S | 0.01 | 29 |
| 30 | 0.183 | 0 S | 0 | 0.088 | 1 S | 0.01 | 0.043 E | 1 | 0 | 30 |
| 31 | | | | 0.086 | 1 | 0 | 0.048 A | 0 S | 0 | 31 |
| TOTAL | 14.387 | | 33.61 | 3.057 | | 0.38 | 1.838 | | 0.30 | TOTAL |

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

WAMPUS CREEK NEAR HINTON - STATION NO. 07AF003

SUSPENDED SEDIMENT FOR 1984

| DAY | SEP DAILY DISCHARGE ($m^3/s$) | SEP MEAN CONCENTRATION (mg/L) | SEP DAILY LOAD (t) | OCT DAILY DISCHARGE ($m^3/s$) | OCT MEAN CONCENTRATION (mg/L) | OCT DAILY LOAD (t) | DAILY DISCHARGE ($m^3/s$) | MEAN CONCENTRATION (mg/L) | DAILY LOAD (t) | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.048 A | 0 | 0 | 0.388 | 1 S | 0.03 | | | | 1 |
| 2 | 0.048 A | 0 | 0 | 0.621 | 17 S | 0.91 | | | | 2 |
| 3 | 0.045 A | 0 | 0 | 1.14 | 83 | 8.21 | | | | 3 |
| 4 | 0.044 A | 0 | 0 | 1.71 | 79 | 11.7 | | | | 4 |
| 5 | 0.045 A | 0 S | 0 | 1.51 | 81 | 10.8 | | | | 5 |
| 6 | 0.421 | 71 S | 2.58 | 1.14 | 34 | 3.38 | | | | 6 |
| 7 | 0.636 | 55 S | 3.02 | 1.01 | 29 | 2.63 | | | | 7 |
| 8 | 0.261 | 11 S | 0.25 | 0.881 | 27 | 2.08 | | | | 8 |
| 9 | 0.277 | 19 S | 0.45 | 0.666 | 22 | 1.27 | | | | 9 |
| 10 | 0.440 | 24 | 0.91 | 0.531 | 20 | 0.92 | | | | 10 |
| 11 | 0.387 | 11 | 0.37 | 0.456 | 17 | 0.67 | | | | 11 |
| 12 | 0.287 | 2 | 0.05 | 0.426 | 16 | 0.60 | | | | 12 |
| 13 | 0.283 | 1 | 0.03 | 0.365 | 15 | 0.47 | | | | 13 |
| 14 | 0.255 | 1 | 0.02 | 0.314 | 14 | 0.38 | | | | 14 |
| 15 | 0.218 | 1 S | 0.02 | 0.278 | 12 | 0.29 | | | | 15 |
| 16 | 0.188 | 0 | 0 | 0.259 | 11 S | 0.25 | | | | 16 |
| 17 | 0.180 | 0 S | 0 | 0.245 | 11 | 0.23 | | | | 17 |
| 18 | 0.215 | 0 S | 0 | 0.221 | 11 | 0.21 | | | | 18 |
| 19 | 0.231 | 0 | 0 | 0.238 | 10 | 0.20 | | | | 19 |
| 20 | 0.210 | 1 | 0.02 | 0.225 | 10 | 0.19 | | | | 20 |
| 21 | 0.255 | 2 | 0.04 | 0.217 | 10 | 0.19 | | | | 21 |
| 22 | 0.250 | 3 | 0.06 | 0.210 B | 10 | 0.18 | | | | 22 |
| 23 | 0.229 A | 3 | 0.05 | 0.204 | 10 | 0.18 | | | | 23 |
| 24 | 0.224 A | 3 | 0.06 | 0.200 | 9 | 0.16 | | | | 24 |
| 25 | 0.215 A | 4 S | 0.07 | 0.195 | 8 | 0.13 | | | | 25 |
| 26 | 0.205 B | 8 | 0.14 | 0.183 B | 7 | 0.11 | | | | 26 |
| 27 | 0.266 B | 8 S | 0.18 | 0.178 B | 7 | 0.11 | | | | 27 |
| 28 | 0.254 B | 3 | 0.07 | 0.170 B | 6 | 0.09 | | | | 28 |
| 29 | 0.252 B | 1 S | 0.02 | 0.164 B | 6 | 0.09 | | | | 29 |
| 30 | 0.278 | 2 S | 0.05 | 0.157 B | 6 | 0.08 | | | | 30 |
| 31 | | | | 0.151 B | 6 S | 0.08 | | | | 31 |
| TOTAL | 7.174 | | 8.47 | 14.846 | | 46.49 | | | | TOTAL |

A - MANUAL GAUGE  B - ICE CONDITIONS  S - SAMPLE(S) COLLECTED THIS DAY

WAMPUS CREEK NEAR HINTON - STATION NO. 07AF003

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 28 | 12:30 | 0.0 | 0.080 | W | 5 | MID | | | | | | | | | | | | | | | | DIP |
| APR 03 | 16:40 | 0.0 | 0.210 | W | 11 | MID | | | | | | | | | | | | 173 | | | | DIP |
| APR 08 | 15:30 | 0.0 | 0.167 | W | 25 | MID | | | | | | | | | | | | 131 | | | | DIP |
| APR 10 | 12:00 | 0.0 | 0.150 | W | 4 | MID | | | | | | | | | | | | | | | | DIP |
| APR 12 | 12:40 | 0.0 | 0.174 | W | 11 | MID | | | | | | | | | | | | | | | | DIP |
| APR 13 | 12:00 | 0.0 | 0.153 | B | 2 | MID | | | | | | | | | | | | | | | | DIP |
| APR 17 | 10:55 | 0.0 | 0.361 | | 15 | MID | | | | | | | | | | | | | | | | DIP |
| APR 18 | 12:00 | 0.5 | 0.382 | | 14 | MID | | | | | | | | | | | | | | | | DIP |
| APR 19 | 10:55 | 0.0 | 0.316 | | 9 | MID | | | | | | | | | | | | | | | | DIP |
| APR 26 | 14:00 | 0.0 | 0.222 | | 6 | MID | | | | | | | | | | | | | | | | DIP |
| APR 28 | 13:30 | 1.5 | 0.189 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| APR 29 | 15:30 | 2.5 | 0.182 | W | 2 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 01 | 10:30 | 1.5 | 0.254 | W | 15 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 02 | 15:15 | 0.5 | 0.274 | W | 13 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 03 | 11:15 | 1.5 | 0.331 | | 6 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 04 | 13:40 | 2.5 | 0.383 | | 13 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 05 | 14:20 | 1.5 | 0.343 | | 6 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 06 | 08:25 | 0.5 | 0.352 | | 16 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 07 | 13:15 | 1.4 | 0.432 | | 19 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 08 | 14:15 | 1.7 | 0.492 | | 21 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 09 | 15:30 | 1.4 | 0.606 | | 36 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 10 | 09:45 | 0.5 | 0.444 | | 16 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 11 | 16:30 | 3.5 | 0.363 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 12 | 15:15 | 4.0 | 0.381 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 13 | 12:45 | 3.5 | 0.351 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 14 | 10:45 | 3.3 | 0.349 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 15 | 15:10 | 2.9 | 0.367 | | 6 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 10:15 | | 0.793 | | 63 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 12:30 | | 0.936 | | 130 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 18:10 | 1.5 | 1.37 | | 288 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 16 | 21:10 | | 1.39 | | 245 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 17 | 11:00 | 2.5 | 0.920 | | 42 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 18 | 11:10 | 1.9 | 0.693 | | 18 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 19 | 14:10 | 4.7 | 0.528 | | 9 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 20 | 17:20 | 5.4 | 0.475 | | 4 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 21 | 14:35 | 4.7 | 0.430 | | 6 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 22 | 13:00 | 5.9 | 0.384 | | 7 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 23 | 14:50 | 5.7 | 0.382 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 24 | 12:00 | 5.0 | 0.385 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 25 | 11:55 | 4.2 | 0.328 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 26 | 11:55 | 5.2 | 0.308 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 27 | 13:30 | 7.1 | 0.304 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 28 | 11:25 | 5.5 | 0.270 | | 8 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 29 | 13:15 | 7.8 | 0.248 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 30 | 13:50 | 11.5 | 0.235 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| MAY 31 | 10:10 | 6.0 | 0.248 | | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 01 | 13:30 | 7.5 | 0.236 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 02 | 11:20 | 1.2 | 0.217 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 03 | 11:20 | 6.2 | 0.208 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 04 | 12:00 | 7.0 | 0.204 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 05 | 15:05 | 8.3 | 0.250 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 06 | 14:20 | 8.3 | 0.404 | | 6 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 07 | 05:40 | | 0.568 | | 9 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 07 | 07:30 | 6.0 | 0.578 | | 8 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 07 | 10:00 | | 0.588 | | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 07 | 23:30 | | 0.791 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 10:25 | 5.1 | 1.88 | | 155 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 19:00 | | 2.02 | | 43 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 22:00 | | 1.86 | | 163 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 08 | 23:30 | | 1.88 | | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 09 | 05:55 | 5.0 | 1.58 | | 44 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 10 | 14:05 | 8.0 | 0.861 | | 5 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 11 | 13:25 | 7.8 | 0.734 | | 8 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 12 | 17:05 | 8.4 | 0.688 | | 5 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 13 | 11:30 | 7.4 | 0.612 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 14 | 13:50 | 10.8 | 0.518 | | 4 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 15 | 10:55 | 9.3 | 0.584 | | 6 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 16 | 15:45 | 9.1 | 0.533 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 17 | 13:10 | 7.4 | 0.522 | | 8 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 18 | 13:45 | 8.5 | 0.503 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 19 | 13:45 | 8.8 | 0.481 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 20 | 11:30 | 7.0 | 0.420 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 21 | 12:30 | 8.0 | 0.372 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 22 | 12:20 | 8.8 | 0.488 | V | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 23 | 11:30 | 9.3 | 0.340 | V | 6 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 24 | 11:50 | 10.0 | 0.258 | | 8 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 25 | 11:50 | 7.8 | 0.245 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 26 | 10:10 | 8.2 | 0.221 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 27 | 11:05 | 8.8 | 0.206 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 28 | 09:50 | 9.0 | 0.189 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 29 | 13:15 | 11.5 | 0.166 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUN 30 | 13:50 | 11.4 | 0.162 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 01 | 13:25 | 8.0 | 0.172 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 02 | 10:50 | 8.2 | 0.161 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 03 | 11:10 | 8.4 | 0.150 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 04 | 13:20 | 10.8 | 0.141 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 05 | 08:15 | 7.1 | 0.138 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 06 | 10:45 | 8.2 | 0.128 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 07 | 14:50 | 8.8 | 0.118 | | 8 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 08 | 15:40 | 13.5 | 0.114 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 09 | 13:30 | 10.0 | 0.106 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 10 | 15:10 | 10.5 | 0.099 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 11 | 14:25 | 12.5 | 0.086 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 12 | 14:40 | 11.0 | 0.085 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 13 | 14:10 | 11.6 | 0.143 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 14 | 11:00 | 9.0 | 0.107 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 15 | 10:50 | 10.0 | 0.088 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 16 | 08:05 | 7.5 | 0.078 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 17 | 11:00 | 12.0 | 0.074 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 18 | 13:15 | 13.2 | 0.071 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 19 | 11:00 | | 0.070 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 20 | 16:15 | 13.4 | 0.084 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 21 | 09:45 | 7.5 | 0.087 | | 3 | MID | | | | | | | | | | | | | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): B - ICE CONDITIONS V - DAILY MEAN; MANUAL GAUGE W - DAILY MEAN; ICE CONDITIONS

CONTINUED

WAMPUS CREEK NEAR HINTON - STATION NO. 07AF003 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE (m³/s) | | INSTANT. CONCENT. (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JUL 22 | 10:45 | 7.3 | 0.108 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 23 | 14:15 | 15.6 | 0.090 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 24 | 14:55 | 17.8 | 0.084 | | 5 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 25 | 13:25 | 15.7 | 0.080 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 26 | 12:25 | 11.6 | 0.075 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 28 | 11:25 | 12.8 | 0.052 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| JUL 30 | 11:15 | 12.4 | 0.057 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 01 | 11:00 | 11.0 | 0.053 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 03 | 10:10 | 11.8 | 0.055 | | 5 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 06 | 15:00 | 13.4 | 0.057 | | 4 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 08 | 14:30 | 16.0 | 0.057 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 10 | 15:50 | 15.8 | 0.064 | | 5 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 13 | 13:30 | 12.0 | 0.046 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 18 | 12:00 | | 0.038 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 19 | 10:50 | 8.0 | 0.037 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 21 | 14:55 | 14.0 | 0.036 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 23 | 08:20 | 8.0 | 0.033 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 24 | 14:15 | 11.3 | 0.037 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 27 | 09:35 | 8.4 | 0.033 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 29 | 10:15 | 4.5 | 0.040 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| AUG 31 | 11:50 | 8.0 | 0.048 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 05 | 15:35 | 11.4 | 0.044 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 08:35 | | 0.085 | | 3 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 10:25 | 7.1 | 0.107 | | 7 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 14:10 | 5.5 | 0.254 | | 38 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 19:00 | 5.0 | 0.872 | | 201 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 06 | 22:10 | | 1.14 | | 185 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 07 | 11:00 | 5.2 | 0.646 | | 29 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 08 | 11:35 | 6.2 | 0.251 | | 10 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 08 | 11:25 | 5.0 | 0.208 | | 15 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 08 | 15:00 | 4.5 | 0.265 | | 5 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 08 | 18:30 | | 0.327 | | 26 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 08 | 23:40 | | 0.520 | | 38 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 15 | 12:35 | | 0.218 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 17 | 16:50 | 8.0 | 0.180 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 18 | 17:30 | | 0.229 | | 0 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 25 | 12:00 | | 0.215 | V | 4 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 27 | 12:50 | 0.0 | 0.266 | W | 8 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 28 | 17:00 | | 0.252 | W | 1 | MID | | | | | | | | | | | | | | | | DIP |
| SEP 30 | 16:05 | 2.0 | 0.255 | | 2 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 01 | 15:40 | 4.0 | 0.330 | | 1 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 02 | 16:05 | 3.0 | 0.606 | | 8 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 02 | 23:15 | | 0.935 | | 68 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 16 | 13:35 | 1.5 | 0.258 | | 11 | MID | | | | | | | | | | | | | | | | DIP |
| OCT 31 | 12:15 | 0.0 | 0.151 | B | 6 | MID | | | | | | | | | | | | 112 | | | | DIP |
| | | | | | | | | | | | | | | | | | | 131 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

DISCHARGE SYMBOL(S): B - ICE CONDITIONS V - DAILY MEAN; MANUAL GAUGE W - DAILY MEAN; ICE CONDITIONS

WAMPUS CREEK NEAR HINTON - STATION NO. 07AF003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : APR-OCT MEAN LOAD (TONNES) | SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : APR-OCT STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | JUN-OCT | M-S | 150 | JUN 08 | 0 | SEP 05 * | 85.9 | JUN 09 | 148 | --- | --- | --- |
| 1968 | MAY-OCT | M-S | 43 | MAY 10 | 1 | SEP 18 | 9.70 | JUL 22 | 77.9 | --- | --- | --- |
| 1969 | MAY-OCT | M-S | 1 090 | AUG 05 * | 0 | SEP 24 | 752 | AUG 05 | 1 980 | --- | --- | --- |
| 1970 | MAY-OCT | M-S | 167 | MAY 10 | 1 | SEP 08 | 67.5 | JUN 15 | 184 | --- | --- | --- |
| 1971 | APR-OCT | M-S | 408 | JUN 09 | 3 | AUG 18 | 188 | JUN 09 | 881 | 2.77 | 2.77 | --- |
| 1972 | MAY-OCT | M-S | 582 | JUN 25 | 1 | AUG 23 | 338 | JUN 25 | 737 | --- | --- | --- |
| 1973 | APR-OCT | M-S | 301 | MAY 15 | 1 | SEP 18 | 135 | MAY 15 | 763 | 3.53 | 3.15 | 12.1 |
| 1974 | APR-OCT | M-S | 130 | JUL 12 | 3 | JUL 03 | 13.7 | MAY 05 | 174 | 0.82 | 2.37 | 34.1 |
| 1975 | APR-OCT | M-S | 105 | MAY 08 | 2 | JUL 29 | 8.67 | MAY 09 | 66.8 | 0.32 | 1.88 | 41.3 |
| 1976 | APR-OCT | M-S | 111 | JUN 15 | 3 | JUL 27 | 11.6 | JUN 15 | 87.0 | 0.46 | 1.98 | 41.6 |
| 1977 | APR-OCT | M-S | 530 | MAY 11 | 3 | APR 21 | 233 | MAY 29 | 1 340 | 5.25 | 3.36 | 40.1 |
| 1978 | APR-OCT | M-S | 414 | MAY 15 | 4 | SEP 01 | 145 | MAY 15 | 483 | 2.17 | 3.33 | 36.3 |
| 1979 | MAY-SEP | M-S | 136 | JUN 20 | 0 | JUL 19 | 12.1 | JUN 20 | 72.3 | --- | --- | --- |
| 1980 | APR-SEP | M-S | 262 | JUN 17 | 1 | SEP 10 | 1 830 | JUN 04 * | 3 500 * | --- | --- | --- |
| 1981 | MAY-OCT | M-S | 237 | MAY 15 | 1 | MAY 05 | 40.2 | JUL 30 | 251 | --- | --- | --- |
| 1982 | APR-NOV | M-S | 1 010 | JUL 04 | 1 | JUN 17 | 384 | JUL 04 | 811 | 3.80 | 2.52 | 28.4 |
| 1983 | APR-NOV | M-S | 276 | JUN 24 | 0 | JUL 29 | 30.5 | JUN 24 | 85.8 | 0.45 | 2.29 | 29.3 |
| 1984 | MAR-OCT | M-S | 268 | MAY 15 | 0 | MAY 12 | 13.5 | JUN 08 | 108 | 0.51 | 2.11 | 28.7 |

M - MANUAL SAMPLING

S - SEASONAL OPERATION

* - EXTREME FOR PERIOD OF RECORD

WASKATENAU CREEK NEAR WASKATENAU - STATION NO. 05EC002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | AUG-SEP # | M-MS | 7 | AUG 14 | 5 | SEP 19 | --- | --- | --- | --- | --- |
| 1975 | JUL-OCT # | M-MS | 3 | JUL 14 | 1 | SEP 10 | --- | --- | --- | --- | --- |
| 1976 | APR-SEP # | M-MS | 159 | APR 04 * | 6 | MAY 20 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 8 | APR 18 | 1 | AUG 09 | --- | --- | --- | --- | --- |
| 1978 | APR-OCT # | M-MS | 24 | APR 13 | 2 | JUL 27 | --- | --- | --- | --- | --- |
| 1979 | APR-SEP # | M-MS | 79 | APR 22 | 0 | AUG 23 * | --- | --- | --- | --- | --- |
| 1980 | APR-SEP # | M-MS | 7 | APR 23 | 5 | JUL 14 | --- | --- | --- | --- | --- |
| 1981 | MAY-MAY | M-MS | 12 | MAY 27 | 12 | MAY 27 | --- | --- | --- | --- | --- |
| 1982 | APR-APR | M-MS | 8 | APR 27 | 8 | APR 27 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

WATERTON RIVER NEAR GLENWOOD - STATION NO. 05AD028

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP (°C) | INSTANT DISCHARGE (m³/s) | INSTANT CONCENT (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | PERCENT SILT | PERCENT CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 27 | 09:25 | 3.0 | 1.82 | 7 | MID | | | | | | | | | | | | 158 | | | | DIP |
| APR 11 | 12:20 | 7.0 | 1.57 | 4 | MID | | | | | | | | | | | | 158 | | | | DIP |
| MAY 01 | 11:20 | 7.0 | 1.57 | 3 | MID | | | | | | | | | | | | 157 | | | | DIP |
| MAY 28 | 12:20 | 14.0 | 1.77 | 10 | MID | | | | | | | | | | | | 158 | | | | DIP |
| JUN 26 | 11:40 | 16.0 | 24.6 | 36 | MID | | | | | | | | | | | | 95 | | | | DH48 |
| JUL 31 | 09:20 | 15.0 | 2.71 | 11 | MID | | | | | | | | | | | | 144 | | | | DIP |
| AUG 27 | 13:00 | 15.0 | 2.07 | 3 | MID | | | | | | | | | | | | 139 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

WATERTON RIVER NEAR GLENWOOD - STATION NO. 05AD028

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | JUL-OCT # | M-MS | 6 | JUL 24 | 1 | OCT 08 | --- | --- | --- | --- | --- |
| 1975 | MAY-NOV # | M-MS | 134 | MAY 13 | 0 | SEP 03 * | --- | --- | --- | --- | --- |
| 1976 | APR-OCT # | M-MS | 43 | APR 14 | 4 | JUL 29 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 28 | OCT 18 | 2 | APR 25 | --- | --- | --- | --- | --- |
| 1978 | APR-NOV # | M-MS | 1 120 | MAY 17 * | 2 | NOV 02 | --- | --- | --- | --- | --- |
| 1979 | APR-OCT # | M-MS | 113 | MAY 30 | 0 | JUL 25 | --- | --- | --- | --- | --- |
| 1980 | MAR-NOV # | M-MS | 158 | MAY 05 | 3 | JUL 31 | --- | --- | --- | --- | --- |
| 1981 | MAR-NOV # | M-MS | 333 | MAY 27 | 3 | AUG 24 | --- | --- | --- | --- | --- |
| 1982 | APR-SEP # | M-MS | 43 | JUN 23 | 1 | AUG 25 | --- | --- | --- | --- | --- |
| 1983 | APR-NOV # | M-MS | 151 | MAY 30 | 4 | JUL 25 | --- | --- | --- | --- | --- |
| 1984 | MAR-AUG | M-MS | 36 | JUN 25 | 3 | MAY 01 | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

WEST ARROWWOOD CREEK NEAR ARROWWOOD - STATION NO. 05BM014

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | MAY-MAY | M-MS | 15 | MAY 14 * | 15 | MAY 14 | --- | --- | --- | --- | --- |
| 1977 | MAY-MAY | M-MS | 4 | MAY 17 | 4 | MAY 17 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

* - EXTREME FOR PERIOD OF RECORD

WEST PRAIRIE RIVER NEAR HIGH PRAIRIE - STATION NO. 07BF002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP (°C) | INSTANT DISCHARGE (m³/s) | INSTANT CONCENT (mg/L) | SINGLE SAMPLING VERTICAL (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 08 | 13:10 | 1.0 | 1.93 | 119 | 17.0 | | | | | | | | | | | | 187 | | | | DH48 |
| APR 16 | 14:45 | 8.0 | 3.37 | 135 | 18.0 | | | | | | | | | | | | 177 | | | | DH48 |
| MAY 19 | 13:00 | 8.0 | 49.3 | 3980 | 13.0 | | | | | | | | | | | | 189 | | | | DH59 |
| MAY 22 | 13:00 | | 35.5 | 2350 | 11.0 | | | | | | | | | | | | 189 | | | | DH59 |
| JUN 08 | 12:25 | 11.0 | 103 | 5730 | MID | 18 | 19 | 30 | 36 | 52 | 67 | 81 | 97 | 100 | | | 201 | 33 | 48 | 19 | DH59 |
| JUN 09 | 12:25 | 11.0 | 103 | 5310 | MID | 18 | 23 | 37 | 46 | 61 | 74 | 84 | 97 | 100 | | | 197 | 26 | 51 | 23 | DH59 |
| JUL 31 | 14:25 | 25.0 | 0.478 | 18 | MID | | | | | | | | | | | | 282 | | | | DH48 |
| SEP 04 | 10:55 | 11.0 | 0.441 | 7 | 8.0 | | | | | | | | | | | | 288 | | | | DH48 |
| SEP 24 | 14:20 | 7.0 | 1.58 | 28 | 11.5 | | | | | | | | | | | | 209 | | | | DH48 |

NOTE : SINGLE VERTICAL IS UNDETERMINED

WEST PRAIRIE RIVER NEAR HIGH PRAIRIE - STATION NO. 07BF002

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | APR-OCT # | M-MS | 3 260 | APR 23 | 13 | AUG 28 | --- | --- | --- | --- | --- |
| 1975 | APR-SEP # | M-MS | 1 630 | APR 28 | 22 | SEP 28 | --- | --- | --- | --- | --- |
| 1976 | APR-OCT # | M-MS | 5 930 | JUN 27 | 47 | OCT 28 | --- | --- | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 2 430 | APR 13 | 15 | SEP 21 | --- | --- | --- | --- | --- |
| 1978 | JUL-OCT # | M-MS | 78 | SEP 27 | 13 | AUG 28 | --- | --- | --- | --- | --- |
| 1979 | APR-SEP # | M-MS | 4 250 | JUL 04 | 26 | SEP 18 | --- | --- | --- | --- | --- |
| 1980 | MAY-OCT # | M-MS | 341 | JUN 03 | 18 | OCT 27 | --- | --- | --- | --- | --- |
| 1981 | MAY-JUL # | M-MS | 253 | MAY 27 | 10 | JUL 07 | --- | --- | --- | --- | --- |
| 1982 | APR-OCT # | M-MS | 1 280 | MAY 03 | 40 | OCT 04 | --- | --- | --- | --- | --- |
| 1983 | APR-OCT # | M-MS | 5 600 | JUL 28 * | 33 | OCT 24 | --- | --- | --- | --- | --- |
| 1984 | APR-SEP | M-MS | 5 730 | JUN 09 | 7 | SEP 04 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

WEST STREETER CREEK NEAR HANTON - STATION NO. 05AB022

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : JAN-DEC MEAN LOAD (TONNES) | SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES) | SUMMARY : JAN-DEC HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1985 | JAN-DEC | M-S | 21 | JUL 03 | 0 | APR 05 * | 0.03 | JUN 18 * | --- | 0 | 0.00 | --- |
| 1986 | JAN-DEC | M-C | 5 | JUN 18 | 3 | JUN 10 | 0.03 | JUN 06 | --- | 0 | 0.00 | 0.0 |
| 1987 | JAN-DEC | M-C | 2 260 | JUN 05 * | 4 | AUG 25 | 0 | JAN 01 | --- | 0 | 0.00 | 0.0 |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION

* - EXTREME FOR PERIOD OF RECORD

WEST STREETER CREEK NEAR HANTON - STATION NO. 05AB022

MONTHLY AND ANNUAL TOTAL VOLUMETRIC BED LOAD IN CUBIC METRES

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL | YEAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1985 |
| 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1986 |
| 1987 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1987 |
| MEAN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | MEAN |

BED LOAD MEASURED BY VOLUMETRIC METHOD. MONTHLY DISTRIBUTION ESTIMATED.

WHIRLPOOL RIVER NEAR THE MOUTH - STATION NO. 07AA009

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | SUMMARY : HISTORICAL MEAN LOAD (TONNES) | SUMMARY : HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-JUN # | M-MS | 763 | JUN 01 * | 17 | MAY 18 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

WHISKEYJACK CREEK NEAR HINTON - STATION NO. 07AD004

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | SUMMARY : MAY-OCT MEAN LOAD (TONNES) | SUMMARY : MAY-OCT HISTORICAL MEAN LOAD (TONNES) | SUMMARY : MAY-OCT HISTORICAL STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1966 | JUN-SEP | M-S | 13 | JUL 15 | 1 | JUL 23 | 0.16 | AUG 05 | 0.75 | --- | --- | --- |
| 1967 | MAY-SEP | M-S | 35 | MAY 16 | 0 | SEP 10 * | 0.82 | JUN 09 | 2.08 | --- | --- | --- |
| 1968 | MAY-OCT | M-S | 27 | MAY 14 | 1 | MAY 08 | 0.03 | MAY 14 | --- | --- | --- | --- |
| 1969 | MAY-DEC | M-S | 21 | MAY 09 | 0 | OCT 16 | 0.10 | JUL 05 | 0.33 | 0.01 | 0.01 | --- |
| 1970 | MAR-OCT | M-S | 34 | JUN 17 | 2 | SEP 16 | 0.36 | JUN 16 | 0.86 | 0.01 | 0.01 | 0.0 |
| 1971 | MAY-OCT | M-S | 39 | JUN 09 | 0 | SEP 27 | 0.81 | JUL 11 | 5.12 | 0.03 | 0.02 | 35.3 |
| 1972 | MAR-DEC | M-S | 63 | MAY 18 | 0 | JUL 18 | 0.58 | JUN 25 | 4.47 | 0.03 | 0.02 | 28.8 |
| 1973 | MAY-DEC | M-S | 11 | AUG 14 | 1 | JUN 20 | 0.35 | MAY 28 | 1.11 | 0.01 | 0.02 | 25.0 |
| 1974 | MAY-DEC | M-S | 11 | MAY 24 | 0 | SEP 12 | 0.13 | JUL 12 | 0.28 | --- | --- | --- |
| 1975 | MAY-NOV | M-S | 37 | JUN 08 | 0 | JUL 21 | 0.18 | JUN 28 | --- | 0 | 0.02 | 27.4 |
| 1976 | APR-OCT | M-S | 61 | AUG 16 | 0 | MAY 05 | 0.33 | AUG 16 | --- | 0 | 0.01 | 46.4 |
| 1977 | APR-OCT | M-S | 145 | MAY 11 | 0 | SEP 21 | 1.32 | MAY 11 | 7.11 | 0.04 | 0.02 | 27.5 |
| 1978 | MAY-OCT | M-S | 304 | JUL 11 * | 0 | SEP 01 | 4.68 | JUL 11 * | 11.1 * | 0.07 | 0.02 | 38.2 |
| 1979 | MAY-OCT # | M-S | 61 | JUL 05 | 0 | AUG 28 | 0.03 | JUL 31 | --- | --- | --- | --- |
| 1980 | AUG-SEP # | M-MS | 6 | AUG 08 | 1 | AUG 18 | --- | | --- | --- | --- | --- |
| 1981 | APR-NOV | M-S | 13 | JUL 21 | 1 | JUN 24 | 0.46 | JUL 23 | 2.14 | 0.02 | 0.02 | 34.2 |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

ALBERTA

WILDHAY RIVER NEAR HINTON - STATION NO. 07AC001

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | TOTAL FOR PERIOD (TONNES) | SUMMARY : MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | MAY-JUN # | M-MS | 2 970 | JUN 13 * | 28 | MAY 17 * | --- | --- | --- | --- | --- |

M - MANUAL SAMPLING

MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

WILLOW CREEK ABOVE CHAIN LAKES - STATION NO. 05AB028

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR 05 | 10:40 | 4.0 | 0.198 | 28 | MID | | | | | | | | | | | | 215 | | | | DH48 |
| MAY 01 | 13:25 | 5.0 | 0.281 | 1 | MID | | | | | | | | | | | | 213 | | | | DH48 |
| MAY 23 | 13:59 | 10.0 | 0.850 | 5 | MID | | | | | | | | | | | | 191 | | | | DH48 |
| JUN 11 | 13:05 | 8.0 | 1.41 | 14 | MID | | | | | | | | | | | | 207 | | | | DH48 |
| JUL 12 | 10:40 | 14.5 | 0.178 | 3 | MID | | | | | | | | | | | | 198 | | | | DH48 |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

WILLOW CREEK ABOVE CHAIN LAKES - STATION NO. 05AB028

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | TOTAL FOR PERIOD (TONNES) | SUMMARY : JAN-DEC MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1965 | JUN-OCT | M-S | 1 680 | JUN 17 | 1 | AUG 15 | 2 230 | JUN 18 | 5 410 | --- | --- | --- |
| 1966 | MAR-DEC | M-S | 1 400 | JUN 04 | 1 | JUL 27 | 872 | JUN 05 | 2 330 | --- | --- | --- |
| 1967 | JAN-DEC | M-C | 1 350 | MAY 21 | 2 | AUG 01 | 7 180 | MAY 31 * | 30 900 * | 84.6 | 84.6 | --- |
| 1968 | JAN-DEC | M-C | 190 | APR 01 | 1 | JUL 17 | 64.4 | JUN 07 | 585 | 1.80 | 43.1 | 96.3 |
| 1969 | JAN-DEC | M-C | 2 080 | JUN 29 * | 0 | JUL 24 * | 4 880 | JUN 29 | 18 700 | 51.3 | 46.8 | 52.7 |
| 1970 | JAN-DEC | M-C | 1 750 | MAY 05 | 0 | SEP 17 | 801 | MAY 05 | 3 300 | 9.04 | 35.5 | 52.9 |
| 1971 | JAN-DEC | M-C | 178 | JUN 05 | 0 | JUN 22 | 180 | JUN 08 | 857 | 1.80 | 29.7 | 56.7 |
| 1972 | JAN-DEC | M-C | 91 | MAY 15 | 0 | JUN 21 | 58.5 | MAY 14 | 1 130 | 3.09 | 25.2 | 56.4 |
| 1973 | JAN-DEC | M-C | 354 | MAY 25 | 0 | NOV 19 | 340 | MAY 25 | 1 250 | 3.41 | 22.1 | 56.2 |
| 1974 | JAN-DEC | M-C | 255 | APR 28 | 0 | JAN 21 | 374 | APR 27 | 1 700 | 4.87 | 19.8 | 56.1 |
| 1975 | JAN-DEC | M-C | 1 390 | JUN 20 | 1 | JAN 08 | 4 620 | JUN 20 | 6 830 | 24.5 | 20.4 | 47.5 |
| 1976 | JAN-DEC | M-C | 850 | AUG 06 | 0 | SEP 20 | 1 180 | AUG 06 | 2 970 | 8.13 | 19.2 | 45.6 |
| 1977 | JAN-DEC | M-C | 25 | APR 06 | 1 | JUN 17 | 2.31 | APR 06 | 44.9 | 0.13 | 17.6 | 46.3 |
| 1978 | JAN-OCT # | M-MS | 40 | MAR 17 | 0 | JAN 03 | --- | | --- | --- | --- | --- |
| 1980 | APR-NOV # | M-MS | 29 | MAY 28 | 4 | AUG 28 | --- | | --- | --- | --- | --- |
| 1981 | MAR-OCT # | M-MS | 413 | MAY 22 | 4 | SEP 02 | --- | | --- | --- | --- | --- |
| 1982 | APR-SEP # | M-MS | 44 | JUN 07 | 1 | SEP 14 | --- | | --- | --- | --- | --- |
| 1983 | APR-OCT # | M-MS | 40 | MAY 25 | 2 | JUL 18 | --- | | --- | --- | --- | --- |
| 1984 | APR-JUL | M-MS | 28 | APR 05 | 1 | MAY 01 | --- | | --- | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

\# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

WILLOW CREEK NEAR CLARESHOLM - STATION NO. 05AB021

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1984

| DATE | TIME | WATER TEMP. (°C) | INSTANT. DISCHARGE ($m^3/s$) | INSTANT. CONCENT. (mg/L) | SINGLE VERTICAL SAMPLING (m) | PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 | .004 | .008 | .016 | .031 | .062 | .125 | .250 | .500 | 1.00 | 2.00 | DISSOLVED SOLIDS (mg/L) | PERCENT SAND | SILT | CLAY | TYPE OF SAMPLER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAR 28 | 10:25 | 1.0 | 0.833 | 8 | MID | | | | | | | | | | | | 238 | | | | DH48 |
| APR 10 | 09:40 | 8.0 | 0.610 | 5 | MID | | | | | | | | | | | | 252 | | | | DH48 |
| APR 30 | 08:30 | 8.0 | 0.554 | 9 | MID | | | | | | | | | | | | 284 | | | | DIP |
| JUN 04 | 10:05 | 16.0 | 0.358 | 8 | MID | | | | | | | | | | | | 249 | | | | DIP |
| JUN 25 | 09:50 | 17.0 | 0.786 | 3 | MID | | | | | | | | | | | | 216 | | | | DIP |
| JUL 30 | 10:20 | 17.0 | 0.401 | 9 | MID | | | | | | | | | | | | 175 | | | | DIP |

NOTE : SINGLE VERTICAL LOCATED AT MIDSTREAM

WILLOW CREEK NEAR CLARESHOLM - STATION NO. 05AB021

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : JAN-DEC MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1964 | APR-DEC | M-S | 3 150 | MAY 06 | 13 | OCT 15 | 7 800 | MAY 07 | 55 100 | | --- | --- | --- |
| 1965 | JAN-DEC | M-C | 3 050 | JUN 18 | 3 | SEP 17 | 9 860 | JUN 18 | 27 000 | | 73.9 | 73.9 | --- |
| 1966 | JAN-DEC | M-C | 2 280 | JUN 05 | 4 | AUG 25 | 5 580 | JUN 05 | 23 800 | | 85.2 | 89.6 | 6.3 |
| 1967 | JAN-DEC | M-C | 4 450 | MAY 31 | 8 | SEP 22 | 31 300 | MAY 31 | 138 000 | | 381 | 173 | 50.0 |
| 1968 | JAN-DEC | M-C | 937 | JUN 12 | 5 | AUG 30 | 937 | JUN 08 | 3 820 | | 9.89 | 132 | 53.7 |
| 1969 | JAN-DEC | M-C | 4 540 | JUN 25 | 0 | SEP 29 * | 40 800 | JUN 30 * | 215 000 * | | 591 | 224 | 50.2 |
| 1970 | JAN-DEC | M-C | 2 980 | JUN 14 | 0 | OCT 23 | 12 300 | JUN 14 | 28 000 | | 75.8 | 200 | 47.5 |
| 1971 | JAN-DEC | M-C | 1 030 | JUN 07 | 2 | NOV 01 | 2 020 | JUN 07 | 10 200 | | 27.9 | 175 | 48.0 |
| 1972 | JAN-DEC | M-C | 2 080 | MAR 11 | 0 | OCT 02 | 5 880 | MAY 26 | 44 100 | | 121 | 188 | 43.5 |
| 1973 | JAN-DEC | M-C | 779 | MAY 27 | 1 | OCT 05 | 2 080 | MAY 27 | 10 100 | | 27.8 | 153 | 43.3 |
| 1974 | JAN-DEC | M-C | 2 410 | MAY 01 | 1 | OCT 18 | 5 540 | MAY 01 | 38 700 | | 108 | 148 | 40.2 |
| 1975 | JAN-DEC # | M-MS | 5 210 | JUN 20 * | 6 | JAN 08 | --- | | --- | | --- | --- | --- |
| 1976 | MAR-NOV # | M-MS | 268 | AUG 12 | 4 | NOV 03 | --- | | --- | | --- | --- | --- |
| 1977 | APR-OCT # | M-MS | 19 | APR 13 | 1 | OCT 31 | --- | | --- | | --- | --- | --- |
| 1978 | MAR-OCT # | M-MS | 734 | MAR 28 | 2 | OCT 30 | --- | | --- | | --- | --- | --- |
| 1979 | APR-OCT # | M-MS | 121 | MAY 28 | 0 | AUG 20 | --- | | --- | | --- | --- | --- |
| 1980 | MAR-NOV # | M-MS | 187 | APR 14 | 6 | JUL 28 | --- | | --- | | --- | --- | --- |
| 1981 | MAR-OCT # | M-MS | 1 670 | MAY 23 | 5 | OCT 26 | --- | | --- | | --- | --- | --- |
| 1982 | APR-SEP # | M-MS | 130 | APR 23 | 6 | SEP 27 | --- | | --- | | --- | --- | --- |
| 1983 | MAY-OCT # | M-MS | 28 | JUN 24 | 4 | OCT 31 | --- | | --- | | --- | --- | --- |
| 1984 | MAR-JUL | M-MS | 8 | JUL 30 | 3 | JUN 25 | --- | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

C - CONTINUOUS OPERATION S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

WOLVERINE CREEK NEAR VALLEYVIEW - STATION NO. 07CF003

HISTORICAL SEDIMENT DATA SUMMARY

| YEAR | PERIOD OF RECORD | TYPE OF OPERATION | SAMPLED CONCENTRATION MAXIMUM (mg/L) | | SAMPLED CONCENTRATION MINIMUM (mg/L) | | SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES) | | SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES) | | SUMMARY : MAR-OCT MEAN LOAD (TONNES) | HISTORICAL MEAN LOAD (TONNES) | STANDARD ERROR OF MEAN % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | APR-SEP | M-S | 940 | APR 29 | 20 | MAY 18 | 59.6 | APR 27 | 350 * | | --- | --- | --- |
| 1968 | MAR-OCT | M-S | 233 | MAY 01 | 5 | JUL 03 | 56.3 | JUN 13 | 98.6 | | --- | --- | --- |
| 1969 | MAY-OCT | M-S | 1 930 | JUL 18 * | 0 | SEP 10 * | 125 | JUL 18 * | 128 | | --- | --- | --- |
| 1970 | MAR-OCT | M-S | 394 | APR 20 | 0 | JUN 01 | 11.5 | MAY 17 | 104 | | 0.43 | 0.43 | --- |
| 1971 | MAR-OCT | M-S | 489 | APR 23 | 2 | MAY 08 | 24.6 | JUL 12 | 128 | | 0.53 | 0.48 | 10.4 |
| 1972 | MAR-OCT | M-S | 357 | APR 27 | 0 | MAY 11 | 19.6 | JUN 26 | 158 | | 0.65 | 0.54 | 11.8 |
| 1973 | MAR-OCT | M-S | 158 | MAY 07 | 0 | MAY 23 | 17.8 | JUN 11 | 108 | | 0.44 | 0.51 | 10.0 |
| 1974 | MAR-OCT | M-S | 588 | APR 23 | 7 | MAY 27 | 48.5 | APR 23 | 250 | | 1.03 | 0.82 | 17.9 |
| 1975 | MAY-JUN # | M-MS | 11 | JUN 18 | 4 | MAY 28 | --- | | --- | | --- | --- | --- |
| 1976 | AUG-OCT # | M-MS | 80 | SEP 19 | 4 | OCT 17 | --- | | --- | | --- | --- | --- |
| 1978 | MAY-JUL # | M-MS | 386 | MAY 17 | 22 | JUL 20 | --- | | --- | | --- | --- | --- |
| 1980 | JUN-NOV # | M-MS | 13 | OCT 08 | 8 | JUN 10 | --- | | --- | | --- | --- | --- |
| 1981 | MAR-NOV # | M-MS | 194 | JUL 27 | 8 | JUN 10 | --- | | --- | | --- | --- | --- |

M - MANUAL SAMPLING

S - SEASONAL OPERATION MS - MISCELLANEOUS OPERATION

# - PERIOD OF RECORD INCOMPLETE * - EXTREME FOR PERIOD OF RECORD

| STA. NO. | NAME | PAGE |
|---|---|---|
| 05AA004 | PINCHER CREEK AT PINCHER CREEK | 70 |
| 05AA008 | CROWSNEST RIVER AT FRANK | 15 |
| 05AA011 | MILL CREEK NEAR THE MOUTH | 82 |
| 05AA0[illegible]2 | CASTLE RIVER NEAR BEAVER MINES | 13 |
| 05AA02[illegible] | OLDMAN RIVER NEAR WALDRON'S CORNER | 63 |
| 05AA024 | OLDMAN RIVER NEAR BROCKET | 57 |
| 05AA025 | DUTCH CREEK NEAR THE MOUTH | 24 |
| 05AA027 | RACEHORSE CREEK NEAR THE MOUTH | 72 |
| 05AA028 | CASTLE RIVER AT RANGER STATION | 12 |
| 05AB013 | BEAVER CREEK NEAR BROCKET | 5 |
| 05AB016 | LETHBRIDGE NORTHERN IRRIGATION DISTRICT CANAL AT MENZAGHIES BRIDGE | 44 |
| 05AB021 | WILLOW CREEK NEAR CLARESHOLM | 117 |
| 05AB022 | WEST STREETER CREEK NEAR NANTON | 115 |
| 05AB023 | MIDDLE STREETER CREEK NEAR NANTON | 80 |
| 05AB024 | EAST STREETER CREEK NEAR NANTON | 25 |
| 05AB028 | WILLOW CREEK ABOVE CHAIN LAKES | 118 |
| 05AB029 | MEADOW CREEK NEAR THE MOUTH | 48 |
| 05AB030 | STREETER CREEK (MAIN STEM) NEAR NANTON | 101 |
| 05AD002 | BELLY RIVER NEAR STAND OFF | 5 |
| 05AD007 | OLDMAN RIVER NEAR LETHBRIDGE | 80 |
| 05AD028 | WATERTON RIVER NEAR GLENWOOD | 113 |
| 05AD037 | PIYAMI DRAIN NEAR PICTURE BUTTE | 71 |
| 05AE002 | LEE CREEK AT CARDSTON | 40 |
| 05AE027 | ST. MARY RIVER AT INTERNATIONAL BOUNDARY | 100 |
| 05AE037 | LEE CREEK AT BEAZER | 39 |
| 05AE039 | TOUGH CREEK NEAR BEAZER | 105 |
| 05AH005 | SEVEN PERSONS CREEK AT MEDICINE HAT | 88 |
| 05AH041 | PEIGAN CREEK NEAR PAKOWKI ROAD | 88 |
| 05AJ001 | SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT | 98 |
| 05AK001 | SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 | 95 |
| 05BA002 | PIPESTONE RIVER NEAR LAKE LOUISE | 70 |
| 05BB003 | FORTY MILE CREEK NEAR BANFF | 33 |
| 05BC001 | SPRAY RIVER AT BANFF | 99 |
| 05BF015 | MARMOT CREEK MAIN STEM NEAR SEEBE | 47 |
| 05BF017 | MIDDLE FORK CREEK NEAR SEEBE | 48 |
| 05BF018 | TWIN CREEK NEAR SEEBE | 108 |
| 05BF019 | CABIN CREEK NEAR SEEBE | 12 |
| 05BF020 | MIDDLE FORK CREEK IN CIROUE NEAR SEEBE | 49 |
| 05BH004 | BOW RIVER AT CALGARY | 10 |
| 05BH009 | JUMPINGPOUND CREEK NEAR THE MOUTH | 38 |
| 05BJ004 | ELBOW RIVER AT BRAGG CREEK | 25 |
| 05BK001 | FISH CREEK NEAR PRIDDIS | 32 |
| 05BL007 | STIMSON CREEK NEAR PEKISKO | 101 |
| 05BL008 | HIGHWOOD RIVER NEAR ALDERSYDE | 36 |
| 05BL012 | SHEEP RIVER AT OKOTOKS | 88 |
| 05BL013 | THREEPOINT CREEK NEAR MILLARVILLE | 105 |
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